VIDE-V30484

April 1996
No. 60106

JVC Service Manual

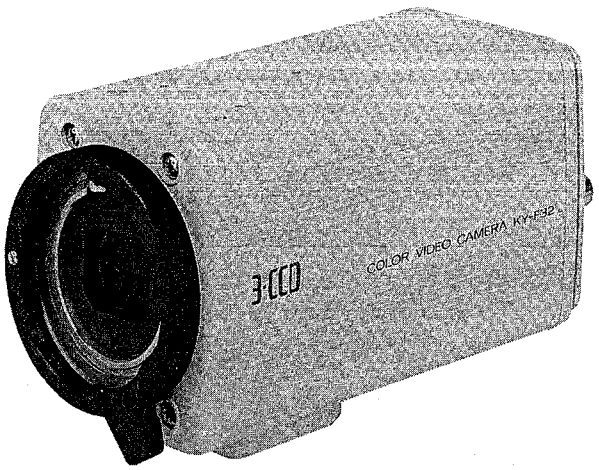
THREE CCD COLOR VIDEO CAMERA
DREI CCD-FARBVIDEO KAMERA
CAMERA VIDEO COULEUR A TROIS CCD

MODEL
MODELL
MODÈLE **KY-F32**

VICTOR COMPANY OF JAPAN, LIMITED

No. 60106

JVC Service Manual



(Lens is optional.)

MODEL **KY-F32**

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Printed in Japan

SECTION 1
SERVICE CAUTIONS AND DISASSEMBLY

1.1 REMOVAL OF COVER

1. Remove four screws (1), and then remove the rear panel (A) with the rear frame.
2. Remove four screws (2) from the cover (B).

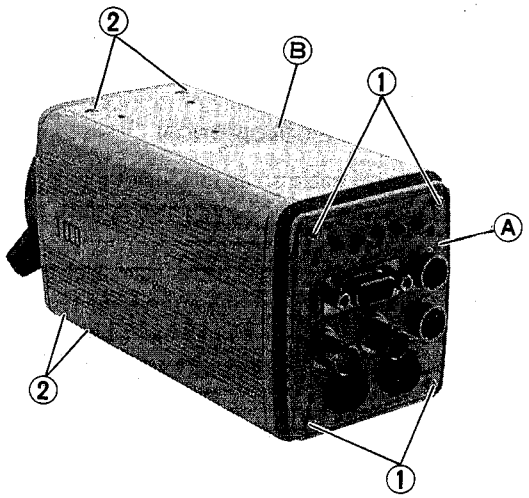


Fig. 1-1-1

1.2 REMOVAL OF CIRCUIT BOARDS

1. Remove the cover (B) referring to the section 1.1.

1.2.1 Removal of ST board

1. Remove four screws (3) while remove the ST board only. When remove the circuit board, remove a screw (4) from front of the bracket (C) and loosen the screws (5) in left and right sides, then the circuit board remove together with the bracket (C) in the direction of the arrow.

Note:
Make sure that the screws (5) are firmly tightened as the ST bracket (C) is closed.

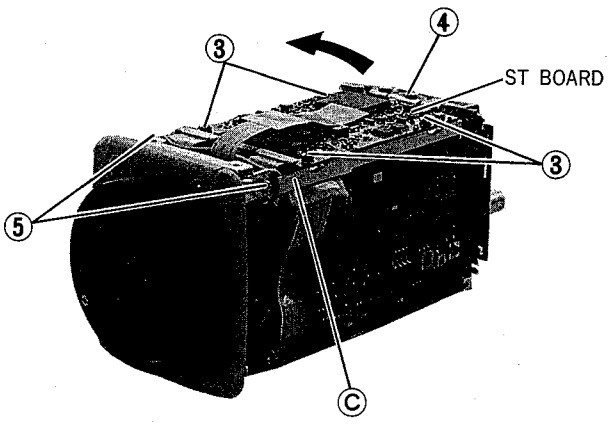


Fig. 1-2-1

1.2.2 Removal of plug-in circuit boards

1. The circuit boards named CE, PR, DT and CP are located on the MT board.
   Pull out these circut boards upward and remove them.

1.2.3 Removal of IF board

1. Remove four screws (6) and pull the rear plate (D) rearward.

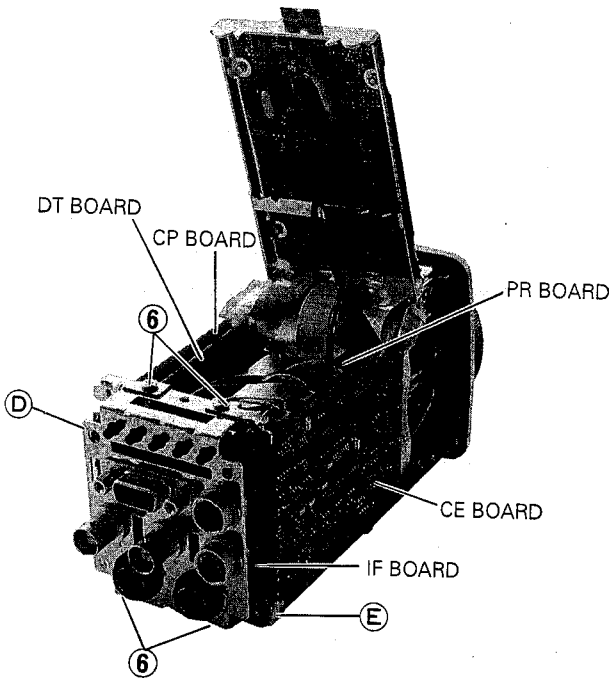


Fig. 1-2-2

2. Unsolder the connector shown in Fig.1-2-3.

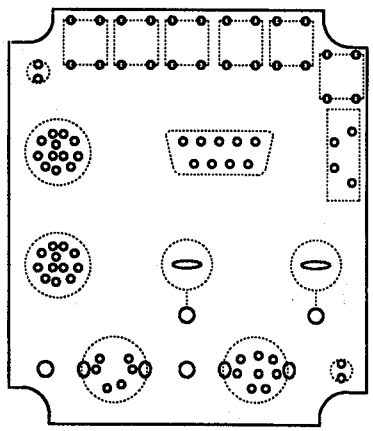


Fig. 1-2-3

1.3 REMOVAL OF FRONT PANEL

1. Remove four screws (7) from the front panel (F), and then detach the front panel (F) with optical block assembly.

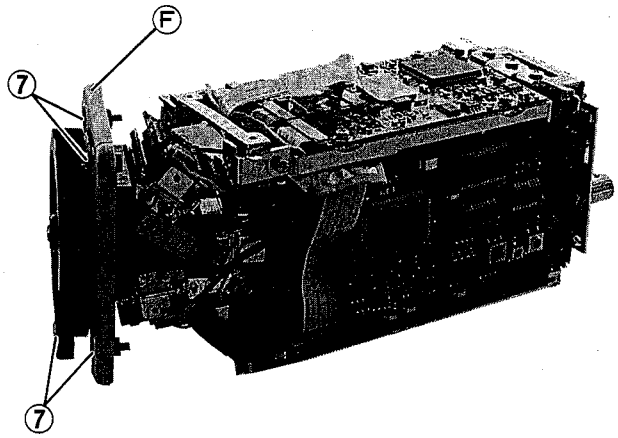


Fig. 1-3-1

1.4 REPLACEMENT OF OPTICAL BLOCK ASSEMBLY

When replacing the optical block assembly, don't remove it from the front panel but replace it together with the front panel. (Refer to Section 4.1.)

When using a new optical block assembly for replacement, remove the cap and two screws (8) first and then take it out of the optical cover to replace the optical block assembly mounted currently with it.

Note:
The cap, two screws (8) and optical cover are unnecessary for replacement, because they are exclusively used for transportation.

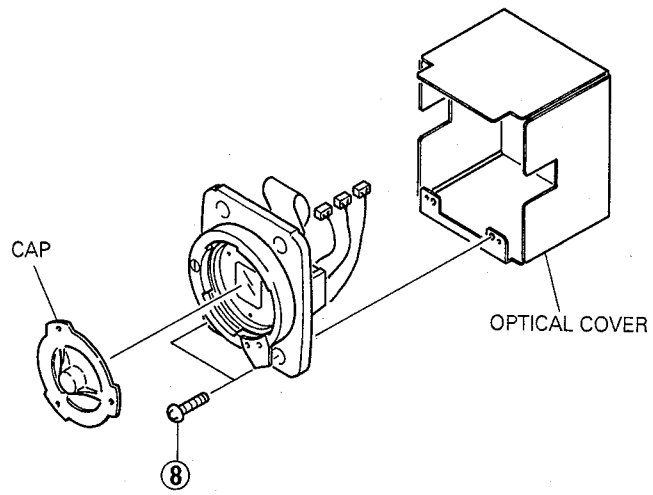


Fig. 1-4-1

1.5 EXTENSION BOARD

For extending the CP, PR boards use the extension board of 24-pin or 14-pin.

24-pin: Part No. SCV2463-024
14-pin: Part No. SCV2463-014

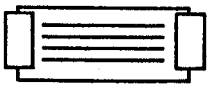


Fig. 1-5-1

1.6 CARD FIT CABLE CONNECTION

- Insert the card fit cable so as to contact the copper leaf on its edge to the connector's contuctive surface as shown in Fig. 1-6-1.
- For disconnecting the card fit cable (flat cable), pull the cable stoppers in the direction of the arrows. To secure the connection of the card fit cable, push the cable stoppers in the reverse direction of the arrows after inserting the cable.

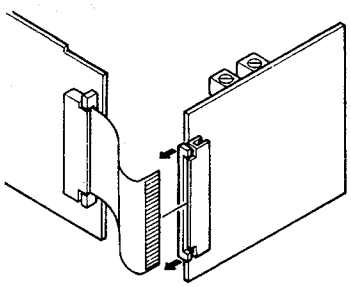
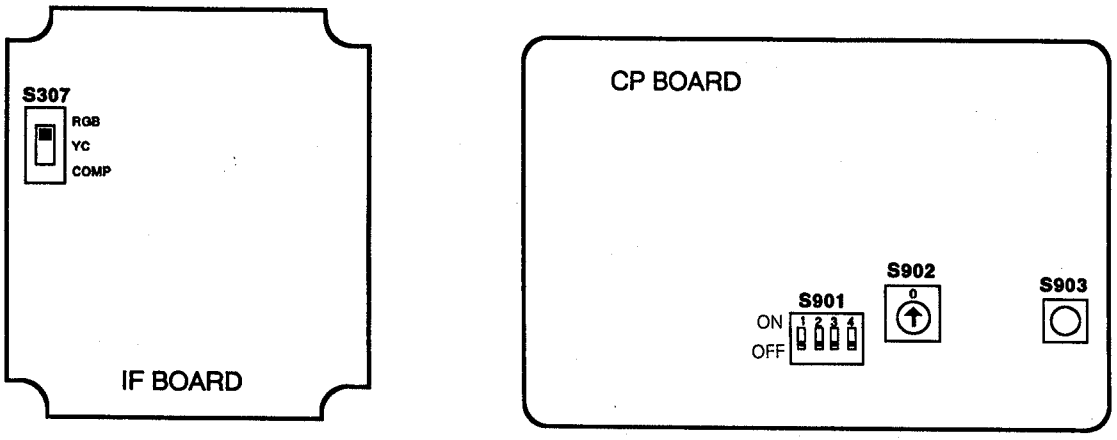


Fig. 1-6-1

1.7 FUNCTION OF CAMERA'S INTERNAL SWITCHES

Respective functions of internal switches of the camera are as follows.

1.7.1 Initial settings on shipment from factory



1.7.2 Table of switch functions

DIP SW		Function
Setting for check and adjustment	S901 [CP]	1 S/N OFF: Normal position ON: S/N mode. (CC = OFF, GAMMA = OFF, M. BLK = Max) •S/N mode is to be used for S/N measurment. 2 AUTO IRIS LEVEL NORMAL OFF: A.IRIS on rear panel is inoperable. ON: A.IRIS on rear panel is operable. 3 SYNC Must be set to OFF. If set to ON, the unit may become malfunction. 4 ADJUSTMENT MODE For specifications refer to "SECTION 2 ELECTRICAL ADJUSTMENT".

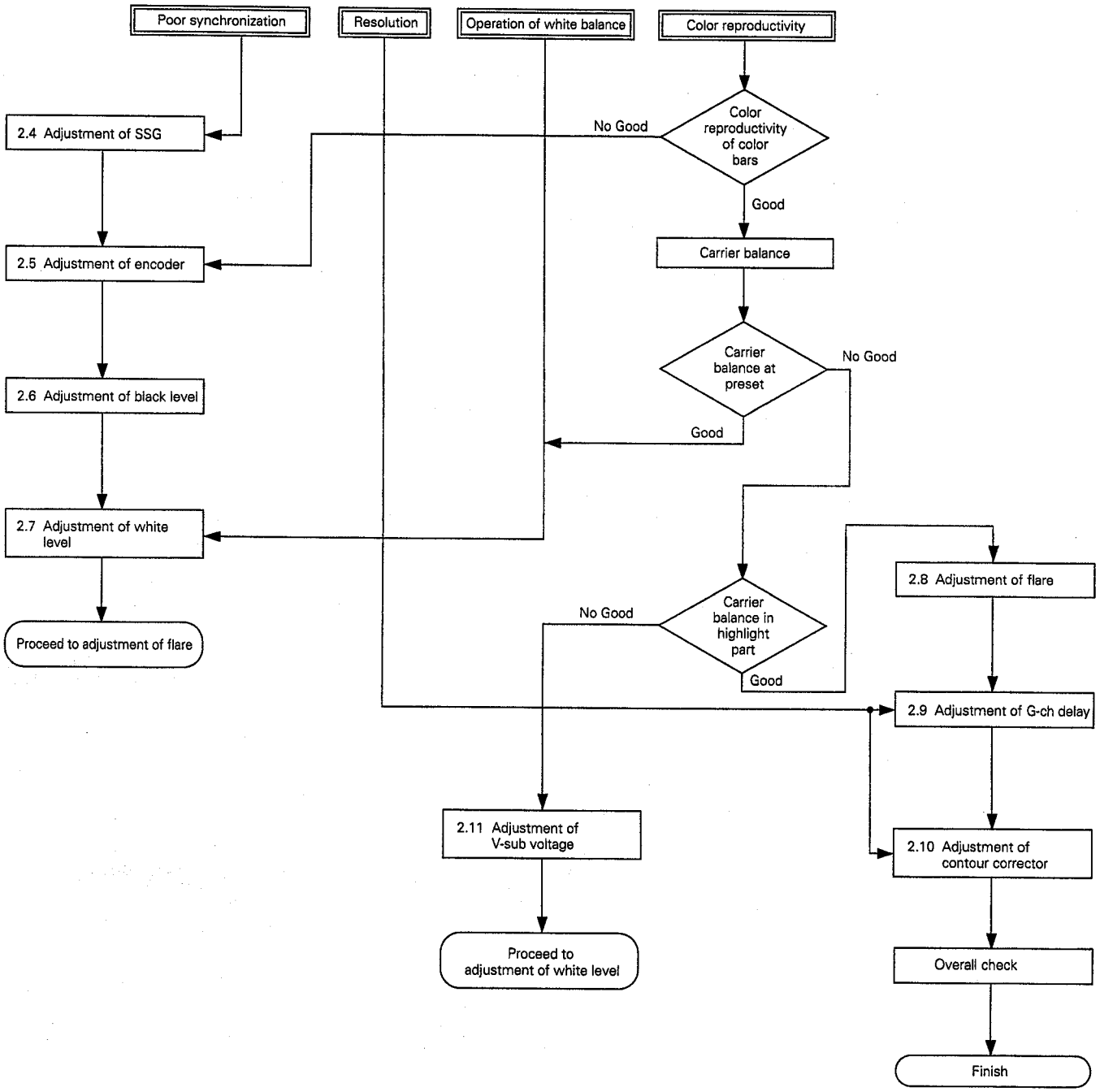
DIP SW		Function
Setting for adjustment items	S902 [CP]	0: SC frequency adjustment 1: Error voltage adjustment 2: R-Y carrier balance adjustment 3: B-Y carrier balance adjustment 4: R-ch input gain adjustment 5: B-ch input gain adjustment 6: R-ch V-sub adjustment 7: G-ch V-sub adjustment 8: B-ch V-sub adjustment 9: R-ch black adjustment A: B-ch black adjustment B: Master black adjustment C: R-ch flare adjustment D: B-ch flare adjustment E: GDL adjustment F: H. contour level adjustment
	S903 [CP]	Adjustment and setting switch To be used in adjustment mode. Adjustment is possible by pressing this once. If it is pressed once more, the DATA which was adjusted with VR901 is stored in IC.(For use, refer to section 2.)
[RGB, Y/C COMP OUT] Select Switch	S307 [IF]	Refer to instructions page 5.

1.8 SYSTEM RESET

While pressing the RESET button, turn on POWER switch to reset the system.
This system reset operation initializes all data on the MENU items that had been set by either of the main unit and remote control unit to the original setting and reference values. (Refer to page 7 of the Instructions.)
Moreover, this system reset clears the TITLE data set by the remote control unit.

SECTION 2
ELECTRICAL ADJUSTMENTS

2.1 FLOWCHART OF ELECTRICAL ADJUSTMENTS



2.2 REQUIRED EQUIPMENT FOR ELECTRICAL ADJUSTMENT

2.2.1 General instruments necessary for adjustment

1. Oscilloscope (capable of measuring on 100 MHz or higher band, moreover,must be calibrated.)
2. Vectorscope (must be calibrated.)
3. Frequency counter (readable eight-digit number and stable with tolerance of 0.1 ppm or 1 x 10^{-7} at 0° to 40°, moreover, must be calibrated)
4. Digital voltmeter (having 10 MΩ or more input impedance, moreover, must be calibrated)
5. Color monitor

2.2.2 Other necessities

1. Power supply : 12V DC (Optional AC power adapter AA-P700)
2. Camera lens (YH13 x 7.5K12 or S14 x 7.5B12 preferable)
   Lighting apparatus: By using a halogen lamps of 3200K, 2000lx illuminative brightness make it a chart please hit uniformly.

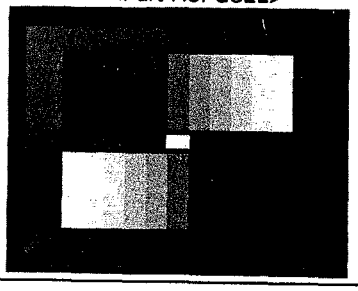
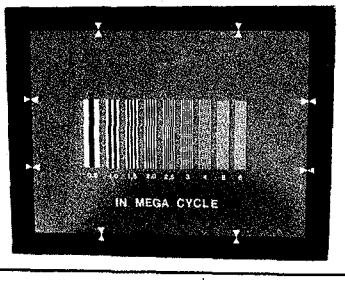
If the lighting appratus is need to adjust illuminance on the test pattern, the following method is very simple to reduce video shading (to turn down contrast).
Connect an oscilloscope to the VIDEO OUTPUT terminal and adjust lighting so that video signal is observed flat at the V-rate.

2.2.3 Special implements for electrical adjustments

NOTE

1) For power supply to this camera, use the power cable (Part No. CE41155-002: 8-pin plug) supplied as a service part to do it from a 12V DC power source, or use the provided DC cable or the DC cable VC462-2 (handled by parts) to supply from the AC power adapter AA-P700 (option).
2) Limited length of cable for power supply is shown below (in case of using AA-P700).

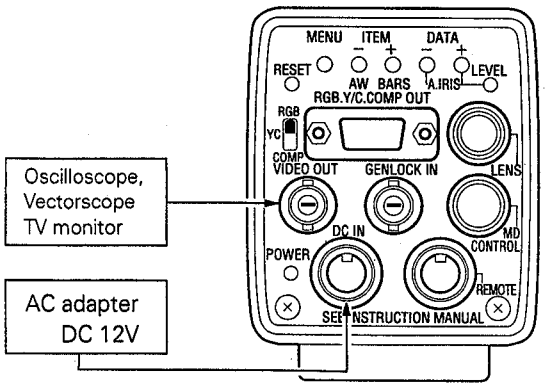
Diameter of conductor	Resistance	Limited cable length
0.5 mm	37 Ω/km	8.7 m
0.75 mm	25 Ω/km	13.0 m

1 Gray scale chart	2 In-megacycle chart
<Part No. GS2L>	<Part No. RESC-010>
	

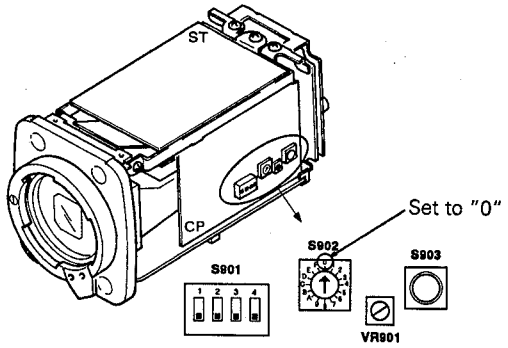
2.3 ADJUSTMENT MODE

Some of the following adjustment items need to set the camera to the "Adjustment mode".
The "Adjustment mode" enables the service personnel to adjust the specified items (except chroma level adjustment and some items of white level adjustment) with only one VR (VR901 on the CP board) by utilizing the rotary encoder (S902 on the CP board).
Adjustment in the "Adjustment mode" should be performed as mentioned below.

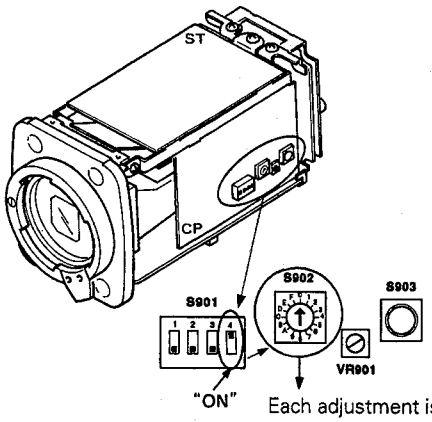
1. Make sure that a TV monitor is connected to the VIDEO OUT terminal of this camera, and supply the rated power (12.0 ± 0.5 V) to the DC IN terminal.

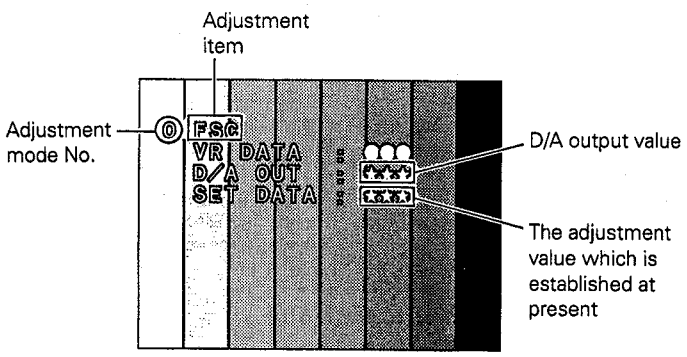


2. Set S902 (rotary encoder switch) on the CP board to the position of "0" with screwdriver.

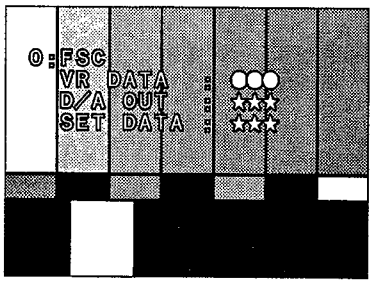


3. Set S901-4 (DIP switch) on the CP board to "ON", and an adjustment picture will appear on the monitor screen. (See the figure below.)
   After the adjustment picture has appeared on the monitor screen, set S902 to the number of the adjustment mode . (When S902 is set to the indicated number, the display turns to the next screen.)





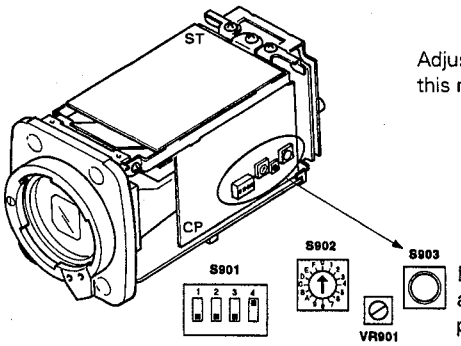
[PAL]



[NTSC]

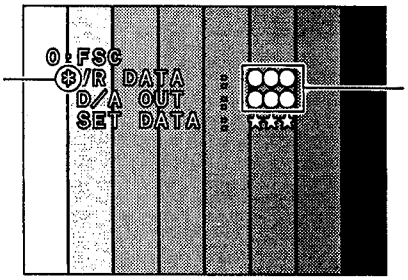
4. Press S903 (tact switch) on the CP board once, and "*" mark appears on the left of "VR DATA" in the adjustment picture. Then, each adjustment can be performed with VR901. At that time, make sure that the value of D/A OUT is the same as that of VR DATA.
   If the selected adjustment is needless to perform, change the setting of S902 to another position for cancelling the selected adjustment. (Setting S901-4 to the "OFF" position also cancels the selection of the adjustment. However, if S901-4 is used to cancel the selected adjustment, it needs a fresh start for another adjustment in the "Adjustment mode".)

Note: S903 has two functions, one is to enter the set into the adjustable status and the other is to store the adjustment data that is set by VR901 in the EEPROM (IC903). Such being the case, if S903 is pressed in the adjustable mode ("*" mark is appearing on the left of "VR DATA"), stored adjustment data is replaced with new data. Be careful not to press S903 unreasonably.



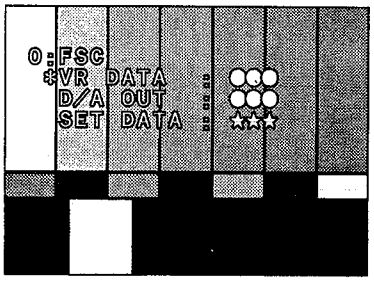
Adjustment is possible when this mark is appearing.

Press S903 once to make adjustment with VR901 possible.



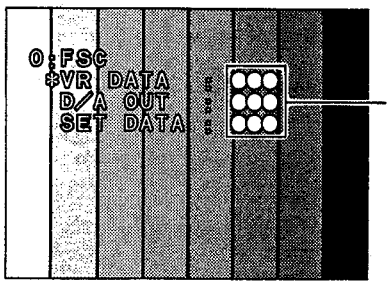
By turning VR901, values of VR DATA and D/A OUT change. (except for flare adjustment)

[PAL]



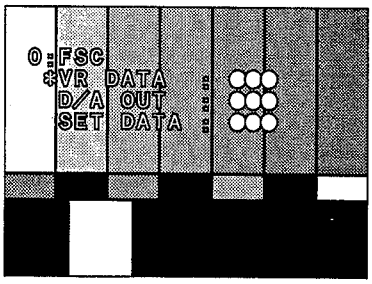
[NTSC]

5. Adjust each item with VR901, press S903 after adjustment, and store adjustment data in EEPROM. In this function, confirm value of SET DATA on adjustment picture and value of VR DATA is equal.



Value of VR DATA is established as adjustment value by press S903.

[PAL]



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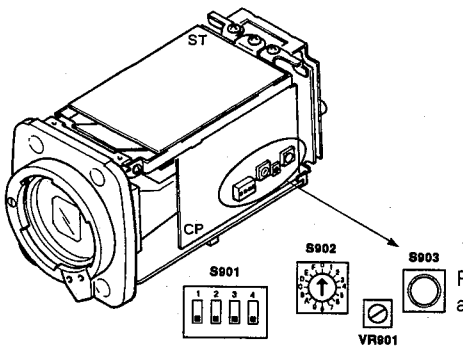


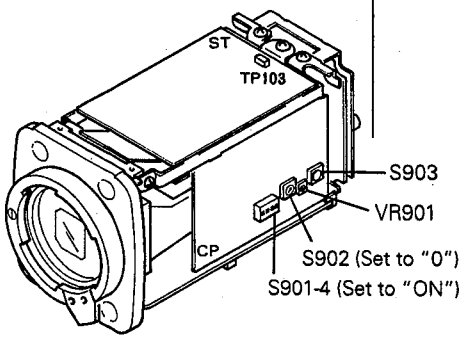
Press S903 once again to store the adjustment data in the memory.

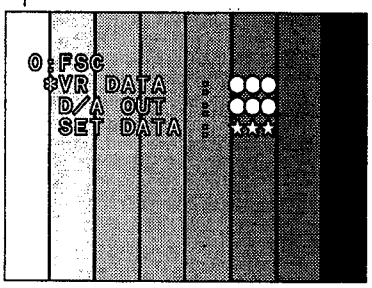
Note: Return S902 to "0" and set S901-4 to "OFF" after all adjustments are complated.

No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓘ) Adjustment level (☆)	Adjustment procedure

2.4 ADJUSTMENT OF SSG

1	SC frequency adjustment	• Frequency counter • TV monitor	Adj. mode "0" (Color bars output)	◎ TP103 [ST] ⓘ VR901 [CP] ☆ PAL:4.433618 MHz ±10 Hz ☆ NTSC:3.579545 MHz ±10 Hz	(1) Set S902 on the CP board to "0". (2) Set S901-4 on the CP board to "ON". (3) While observing through the monitor screen, press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (4) Adjust VR901 to obtain the specified level at the measuring point. (5) Press S903 on the CP board to store the adjustment data in the memory.
2	Error voltage adjustment	• Digital voltmeter • TV monitor	Adj. mode "1" (Color bars output)	◎ TP104 [ST] ⓘ VR901 [CP] ☆ 2.5 ± 0.1 VDC	(1) Set S902 on the CP board to "0" and S901-4 on the same board to "ON". (2) Set S902 to "1". (3) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (4) Adjust VR901 so that DC voltage at TP104 is 2.5 VDC. (5) Press S903 to store the adjustment data in the memory. (6) Set S902 to "0"and return S901-4 to "OFF" after adjustment.





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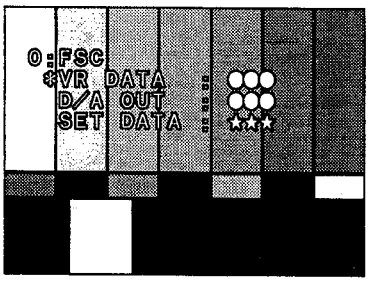
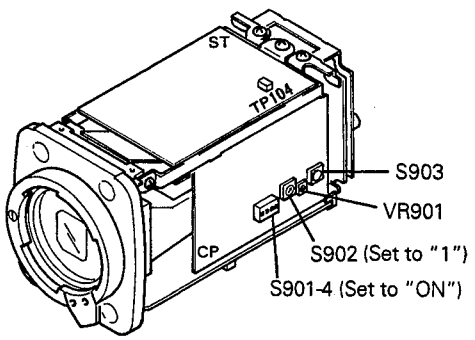
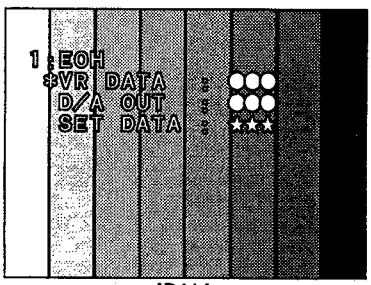


[NTSC]





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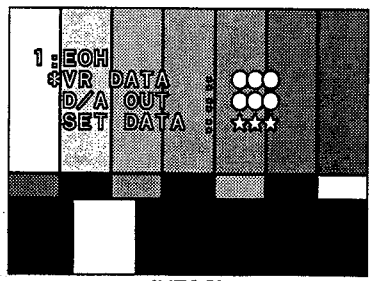
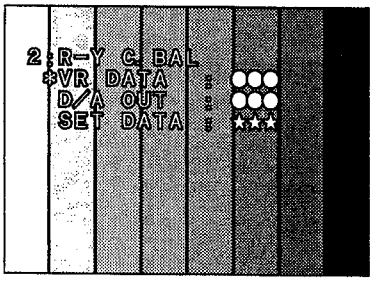


[NTSC]

No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆)	Adjustment procedure

2.5 ADJUSTMENT OF ENCODER

1	Carrier balance adjustment	• Oscilloscope (H-rate) • TV monitor	Adj. mode "2": R-Y (Color bars output)	◎ VIDEO OUTPUT terminal (with 75 Ω terminator) ⓣ VR901 [CP]	(1) Set S902 on the CP board to "0"and set S901-4 on the same board to "ON". (2) Set S902 to "2". (3) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (4) Adjust VR901 to minimize carrier leak in the white and black components. (5) Press S903 to store the adjustment data in the memory.



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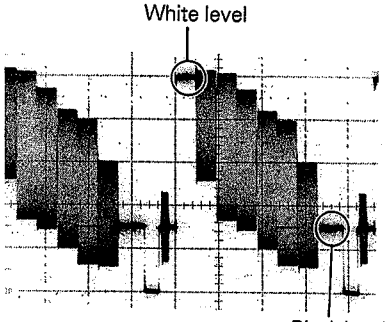
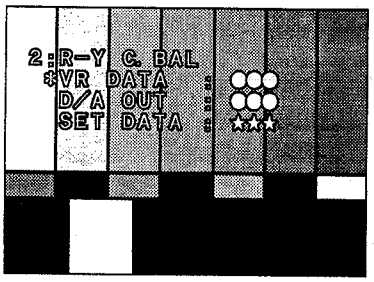
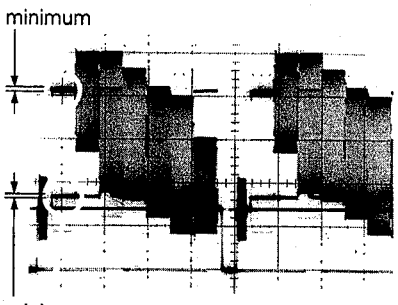
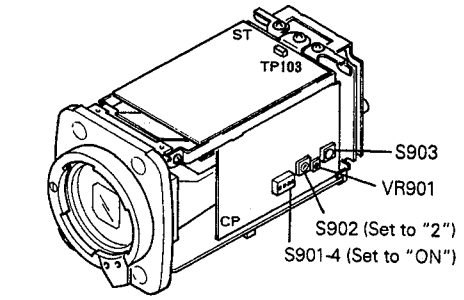


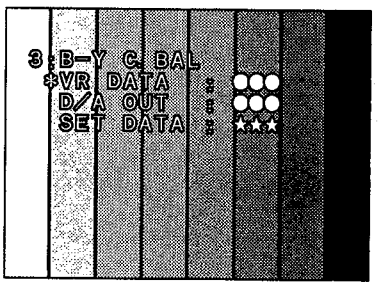


[NTSC]

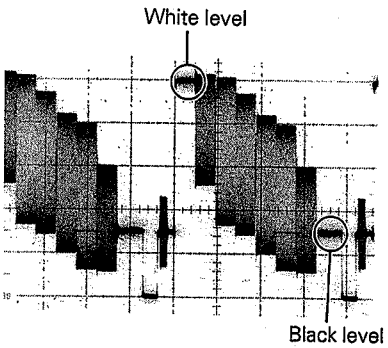


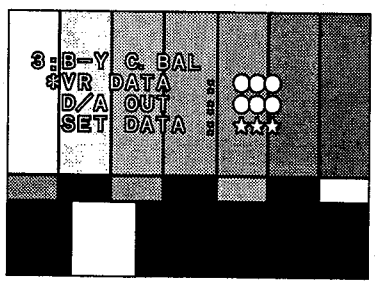


			Adj. mode "3": B-Y (Color bars output)	◎ VIDEO OUTPUT (with 75 Ω terminator) ⓣ VR901 [CP]	(6) Set S902 to "3". (7) Press S903 once to make "*" mark appear on the left of "VR DATA" on the display. (8) Adjust VR901 to minimize carrier leak in the white and black components. (9) Press S903 to store the adjustment data in the memory.

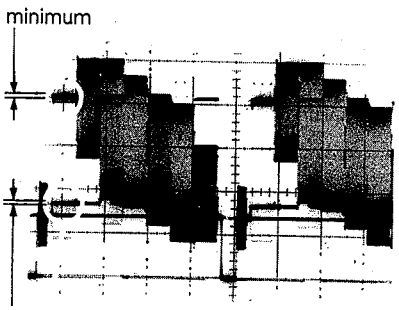


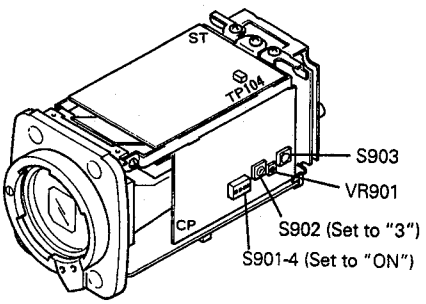
[PAL]

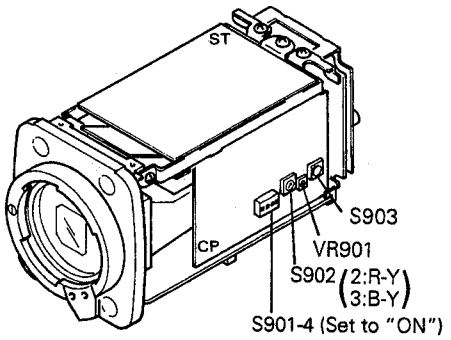
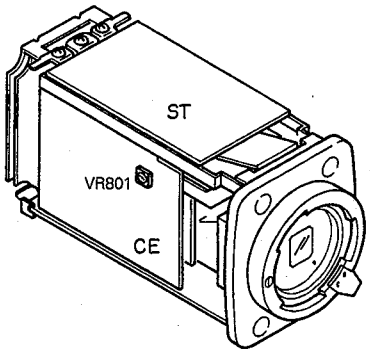




[NTSC]



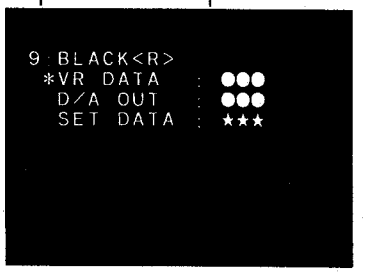


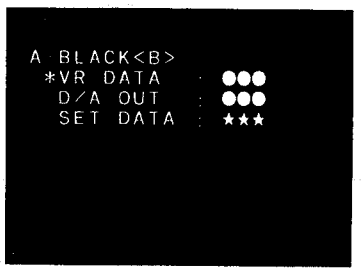
No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆)	Adjustment procedure
		•Oscilloscope (H-rate) • Vectorscope •TV monitor	Adj. mode "2" & "3"	◎ VIDEO OUTPUT (with 75 Ω terminator) ⓣ VR901 [CP]	(10) Repeat the previous steps (1) through (9) until the adjustment is finally satisfactory in the following two points. 1. Carrier leak in the white and black components is at minimum level. (less than 20 mV p-p) 2. The bright spot (white and black spots) in the center of the color bars signal is positioned in the center (intersection point of R-Y and B-Y axes) of the vectorscope screen. (Refer to the figure on the left.) (11) Set S902 to "0" and return S901-4 to "OFF" after adjustment.
					
2	Chroma level adjustment	• Vectorscope • TV monitor	Adj. mode "2" or "3" (Color bars output)	◎ VIDEO OUTPUT terminal (with 75 Ω terminator) ☆ VR801[CE] (C.LEVEL)	(1) Set S902 on the CP board to "0" and S901-4 on the same board to "ON". (2) Set S902 to "2" or "3" and output color bars signal. (3) Set the GAIN control (level regulating VR) of the vectorscope to the preset position, and confirm that the burst level is 75 % of the full level. If not, adjust the burst level to be 75 % with the GAIN control. (4) Adjust VR801 to position each spot (R, G, B, Mg, Cy, YL) at the center of the respectively specified points (⊞ marks) on the vectorscope screen. (5) Set S902 to "0" and return S901-4 to "OFF" after adjustment.
					

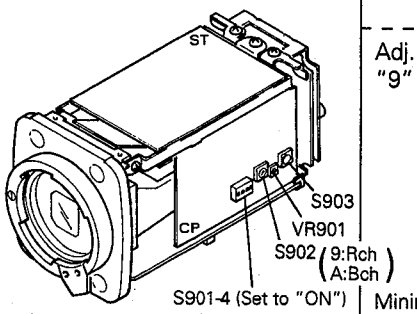
No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆)	Adjustment procedure

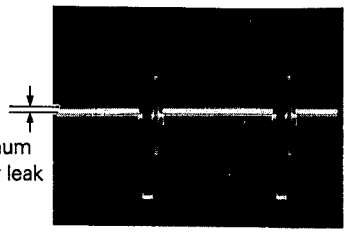
2.6 ADJUSTMENT OF BLACK LEVEL

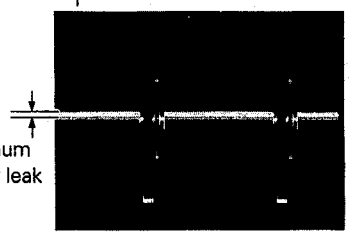
1	Black adjustment	• Oscilloscope (H-rate) • TV monitor	Adj. mode "9": Rch	◎ VIDEO OUTPUT terminal (with 75 Ω terminator) ⓣ VR901 [CP]	(1) Close the lens iris. (2) Set S902 on the CP board to "0"and set S901-4 to "ON". (3) Set S902 to "9". (4) Observing through the monitor screen, press S903 on the CP board once. Then, "*" mark appears on the left of "VR DATA" on the display. (5) Adjust VR901 to minimize carrier leak in the black component. (6) Press S903 on the CP board to store the adjustment data in the memory.
			Adj. mode "A": Bch	◎ VIDEO OUTPUT terminal (with 75 Ω terminator) ⓣ VR901 [CP]	(7) Set S902 to "A". (8) Press S903 once to make "*" mark appear on the left of "VR DATA" on the display. (9) Adjust VR901 to minimize carrier leak in the black component. (10) Press S903 on the CP board to store the adjustment data in the memory.
			Adj. mode "9" & "A"	◎ VIDEO OUTPUT terminal (with 75 Ω terminator) ⓣ VR901 [CP]	(11) Repeat the previous steps (1) through (10) until the adjustment is finally satisfactory in the following two points. 1. Carrier leak in the black component is at minimum level. 2. There is a black spot in the center of vectorscope. (12) Set S902 to "0" and return S901-4 to "OFF" after adjustment.
2	Master black adjustment	• Oscilloscope (H-rate) • TV monitor	Adj. mode "B"	◎ VIDEO OUTPUT terminal (with 75 Ω terminator) ⓣ VR901 [CP] ☆ Pedestal level [PAL] ☆ 53 ± 7 mVp-p [NTSC]	(1) Close the lens iris. (2) Set S902 on the CP board to "0" and S901-4 on the same board to "ON". (3) Set S902 to "B". (4) Press S903 once to make "*" mark appear on the left of "VR DATA" on the display. (5) Adjust VR901 so that black level becomes the measuring point . (6) Press S903 on the CP board to store the adjustment data in the memory. (7) Set S902 to "0"and return S901-4 to "OFF" after adjustment.

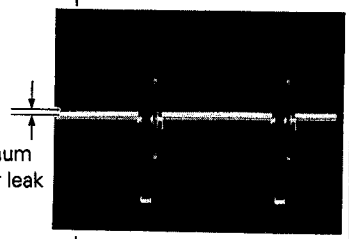


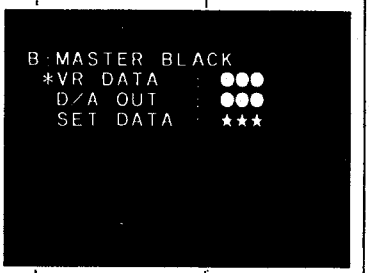


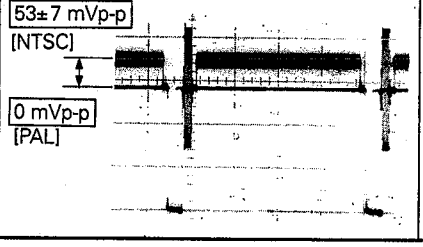








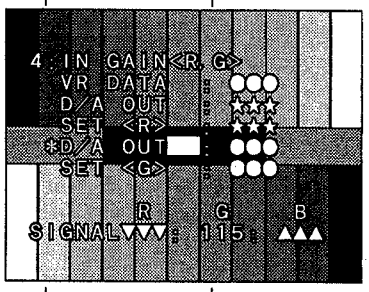


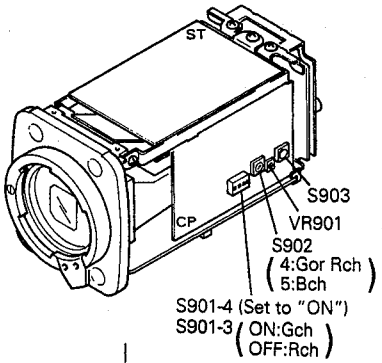


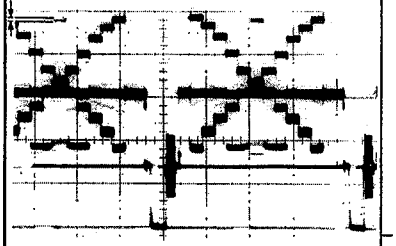
No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆)	Adjustment procedure

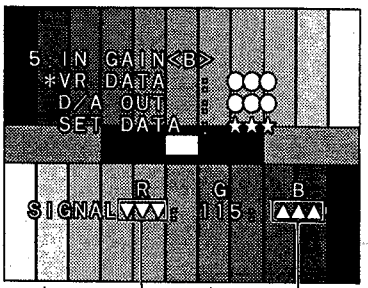
2.7 ADJUSTMENT OF WHITE LEVEL

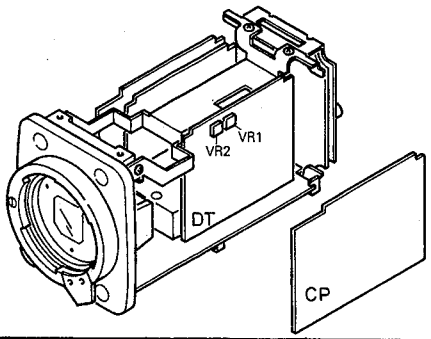
1	Input gain adjustment	• TV monitor • Oscilloscope • Gray scale chart (Just scan)	Adj. mode "4": G ch	◎ VIDEO OUTPUT terminal ⓣ VR901 [CP] ☆ G : 100	(1) Set S902 on the CP board to "0". (2) Set S901-4 on the CP board to "ON". (3) Set S902 to "4". (4) Set S901-3 to "ON". (5) Set the lens iris to F9.5. (6) Press S903 once to make "*" mark appear on the left of "D/A OUT" on the display. (7) While shooting the gray scale chart, adjust VR901 so that the value of G becomes "115" on the display. (8) Press S903 to store the adjustment data in the memory.
	Minimum carrier leak		Adj. mode "4": R ch	◎ VIDEO OUTPUT terminal ⓣ VR901 [CP] ☆ Carrier leak : Minimum	(9) Set S901-3 to "OFF". (10) Press S903 once to make "*" mark appear on the left of "D/A OUT" on the display. (11) Adjust VR901 to minimize carrier leak in the white portion of the gray scale chart. (12) Press S903 to store the adjustment data in the memory.
			Adj. mode "5" : B ch	◎ VIDEO OUTPUT terminal ⓣ VR901 [CP] ☆ Carrier leak : Minimum	(13) Set S902 to "5". (14) Press S903 once to make "*" mark appear on the left of "VR DATA" on the display. (15) Adjust VR901 to minimize carrier leak in the white portion of the gray scale chart. (16) Press S903 to store the adjustment data in the memory.
				◎ VIDEO OUTPUT terminal ⓣ VR1:Bch [DT] ⓣ VR2:Rch [DT] ☆ R – G = ±3 ☆ B – G = ±3	(17) Repeat the above steps from (10) through (16) to minimize carrier leak in the white portion of the gray scale chart as low as possible. (Less than 30 mVp-p) (18) Adjust VR1 and VR2 on the DT board so that the respective values of B and R are as mentioned below. R = within G ± 3 B = within G ± 3 (19) Set S902 to "0" and return S901-4 to "OFF" after adjustment.







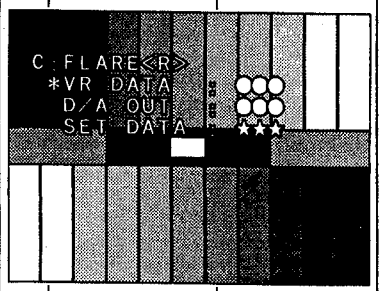




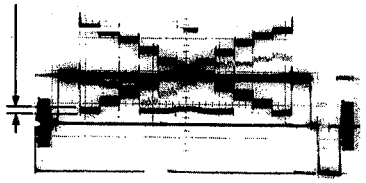
No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆)	Adjustment procedure

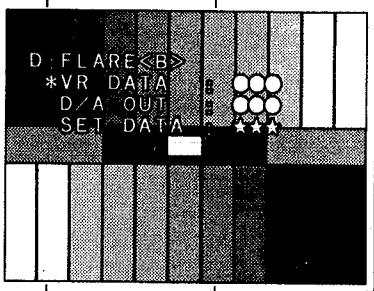
2.8 ADJUSTMENT OF FLARE

1	Flare adjustment	• Oscilloscope (H-rate) • TV monitor • Gray scale chart (Just scan)	Adj. mode "C": Rch	◎ VIDEO OUTPUT terminal (75Ω terminator) ⓣ VR901 [CP]	(1) While shooting the gray scale chart, adjust the lens iris so that the white peak level is 0.714Vp-p (NTSC) / 0.7Vp-p(PAL). Then, open the lens iris by one step. (2) Set S902 on the CP board to "0"and set S901-4 on the same board to "ON". (3) Set S902 to "C". (4) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (5) Adjust VR901 to minimize carrier leak in the black component. (6) Press S903 on the CP board to store the adjustment data in the memory.
			Adj. mode "D": Bch	◎ VIDEO OUTPUT terminal (75Ω terminator) ⓣ VR901 [CP]	(7) Set S902 to "D". (8) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (9) Adjust VR901 to minimize carrier leak in the black component. (10) Press S903 on the CP board to store the adjustment data in the memory.
			Adj. mode "C" & "D"	◎ VIDEO OUTPUT terminal (75Ω terminator) ⓣ VR901 [CP]	(11) Repeat the previous steps (1) through (10) so that carrier leak in the first step of the black of the gray scale is finally minimized (less than 30 mVp-p). (12) Set S902 to "0" and return S901-4 to "OFF" after adjustment.

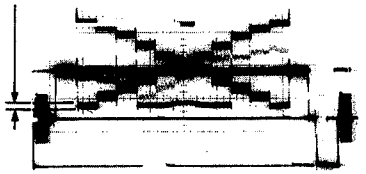


Minimum carrier leak

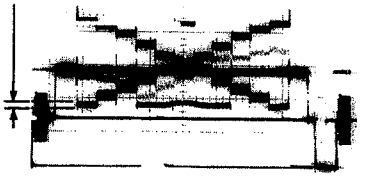


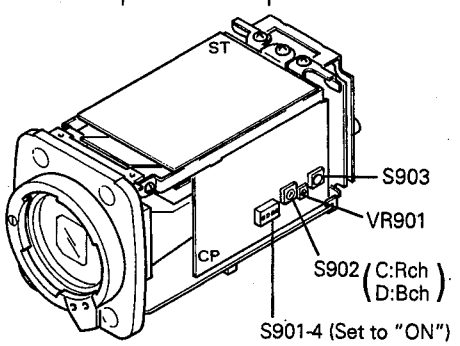


Minimum carrier leak



Minimum carrier leak

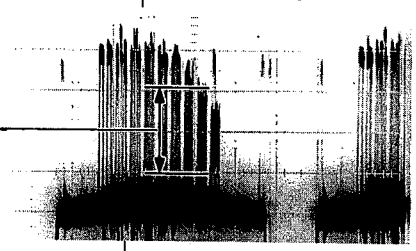


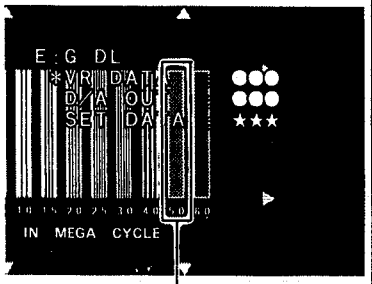


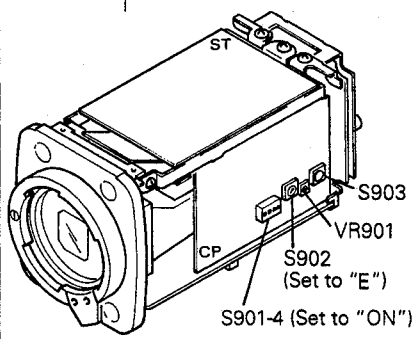
No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆)	Adjustment procedure

2.9 ADJUSTMENT G-ch DELAY

1	G DL adjustment	• Oscilloscope (H-rate) • TV monitor • In-megacycle chart	Adj. mode "E"	◎ VIDEO OUTPUT terminal (75Ω terminator) ⓣ VR901 [CP]	(1) While shooting the in-megacycle chart (just scan), set the lens iris so that the peak of 0.5 MHz becomes 0.714Vp-p(NTSC) / 0.7Vp-p(PAL) (100%). (2) Set S902 on the CP board to "0" and set S901-4 on the CP board to "ON". (3) Set S902 to "E" . (4) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (5) Shoot the in-megacycle chart so that its 5 MHz component is located in the center of the screen. (6) Adjust VR901 to maximize the level of the 5 MHz component. (7) Press S903 to store the adjustment data in the memory. (8) Set S902 to "0" and return S901-4 to "OFF" after adjustment.

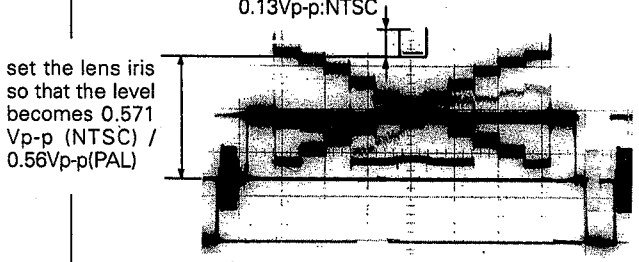


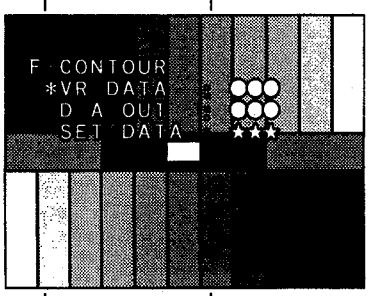


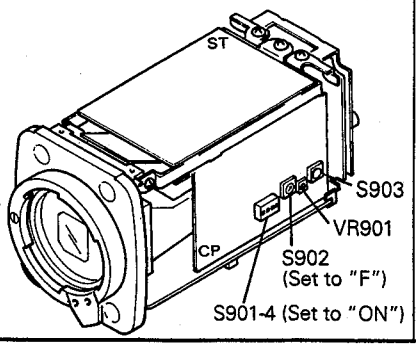


2.10 ADJUSTMENT OF CONTOUR CORRECTOR

1	H.Contour level adjust-ment	• Oscilloscope (H-rate) • TV monitor • Gray scale chart (Just scan)	Adj. mode "F"	◎ VIDEO OUTPUT terminal (75Ω terminator) ⓣ VR901 [CP] ☆ 0.11Vp-p(PAL) ☆ 0.13Vp-p(NTSC)	(1) Set S902 on the CP board to "0" and turn S901-4 on the same board to "ON". (2) Set S902 to "F" . (3) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (4) While shooting gray scale chart, set the lens iris so that the white level of window becomes 0.571Vp-p(NTSC) / 0.56Vp-p(PAL) . (5) Adjust VR901 so that the contour level becomes 0.13Vp-p(NTSC) / 0.11Vp-p(PAL) . (6) Press S903 on the CP board to store the adjustment data in the memory. (7) Set S902 to "0" and return S901-4 to "OFF" after adjustment.





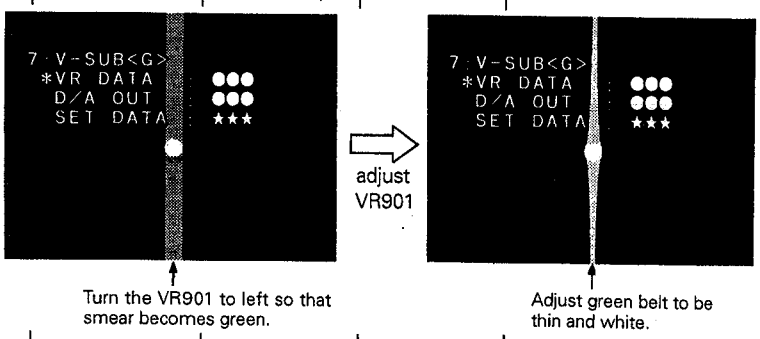


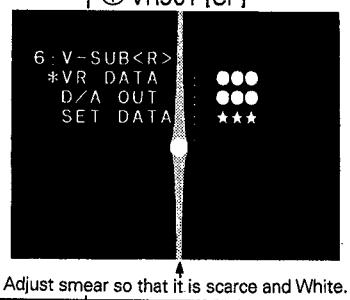
No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆)	Adjustment procedure

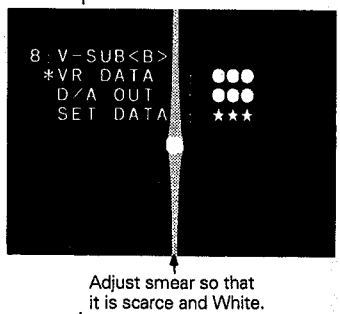
2.11 ADJUSTMENT OF V-sub VOLTAGE

- This adjustment should only be performed after replacement of the optical block assembly.
- Since this adjustment affects the degree of smear and dynamic range, it is required to confirm that there is nothing abnormal in the carrier balance of the highlight of the picture after completion of the adjustment. Moreover, while shooting the gray scale chart as the iris is opened too much, make sure that there is not a considerable change in the carrier of while portion in both a right half and a left half of the picture when the "HI-RESO" of the MENU is set to "ON" from "OFF" and vice versa.

No.	Item	measuring instrument & Input signal	Mode	Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆)	Adjustment procedure
1	Gch V-sub adjustment	• Oscilloscope (H-rate, 10:1) • TV monitor • Vectorscope • Point light source (incandescent lamp of more than 40 W)	Adj. mode "7":Gch	◎ VIDEO OUTPUT terminal ⓣ VR901 [CP]	(1) Set S902 on the CP board to "0" . (2) Turn S901-4 on the CP board to "ON". (3) Set S902 to "7" . (4) Shoot an incandescent lamp. (5) While opening the iris fully, confirm that there is smear in the picture. **Note: When black paper or cloth is used as backgrourd, smear is easy to see.** (6) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (7) While observing through the monitor screen, set VR901 to a position where the green belt of the smear turns into thin and white. **Note: For performing this adjustment with easy, it is recommended to turn VR901 fully counterclock-wise once and then to turn it clockwise gradually.** (8) Press S903 on the CP board to store the adjustment data in the memory. (9) Adjust Rch V-sub.
2	Rch V-sub adjustment	• Oscilloscope (H-rate, 10:1) • TV monitor • Vectorscope • Point light source (incandescent lamp of more than 40 W)	Adj. mode "6":Rch	◎ VIDEO OUTPUT terminal ⓣ VR901 [CP]	(1) Set S902 to "6" . (2) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (3) In the same manner as G-ch adjust VR901 so that the smear is reduced and turns into white. (4) Press S903 on the CP board to store the adjustment data in the memory. (5) Adjust Bch V-sub.
3	Bch V-sub adjustment	• Oscilloscope (H-rate, 10:1) • TV monitor • Vectorscope • Point light source (incandescent lamp of more than 40 W)	Adj. mode "8":Bch	◎ VIDEO OUTPUT terminal ⓣ VR901 [CP]	(1) Set S902 to "8" . (2) Press S903 on the CP board once to make "*" mark appear on the left of "VR DATA" on the display. (3) In the same manner as G-ch adjust VR901 so that the smear is reduced and turns into white. (4) Press S903 on the CP board to store the adjustment data in the memory. (5) Change the adjustment mode to "7", "6" and "8" one after another to confirm that the smear is not increasing and still uncolored. (6) Set S902 to "0" and return S901-4 to "OFF" after adjustment.



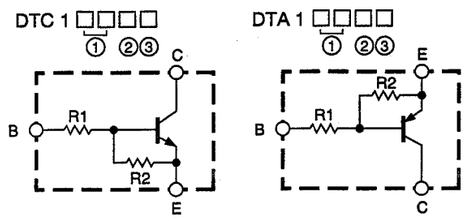




SECTION 3
CHARTS AND DIAGRAMS

■ SCHEMATIC DIAGRAM NOTES

- **Schematic safety precaution**
  ⚠ Parts are safety related parts.
  When replacing them, be sure to use the specified parts.
- **Voltage and waveform measurements.**
  Voltage : Measured with digital voltmeter in DC range; iris closed.
  Waveform : Grey scale illuminated at more than 4000 lux at 3200 K lighting.
- **Terminal logic**
  Top bar of terminal name show input or output logic.
  Top bar shows, the control circuit become active at negative (low) logic input for example.
- **Digital transistors**

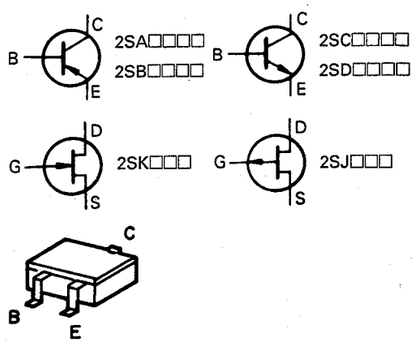


① Number in these two places expresses the ohmage of R1 in abbreviation.
  43 : 4.7kΩ
  14 : 10 kΩ
  24 : 22 kΩ
  44 : 47 kΩ

② Roman letter in the place expresses the resistive ratio between R1 and R2 in abbreviation.
  E : R2/R1 = 1/1
  Y : R2/R1 = 5/1
  W : R2/R1 = 2/1
  X : R2/R1 = 1/2
  T : R2 is opened.

③ Symbol in this place expresses the shape of resistor in abbreviation.

- Transistors and F.E.T.s are:

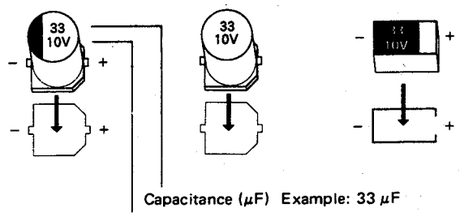


- Definistion of the (A) and the (B) or circuit boards diagrams
  (A) : Side on which discrete parts are assembled
  (B) : Side on which only chip parts are assembled.

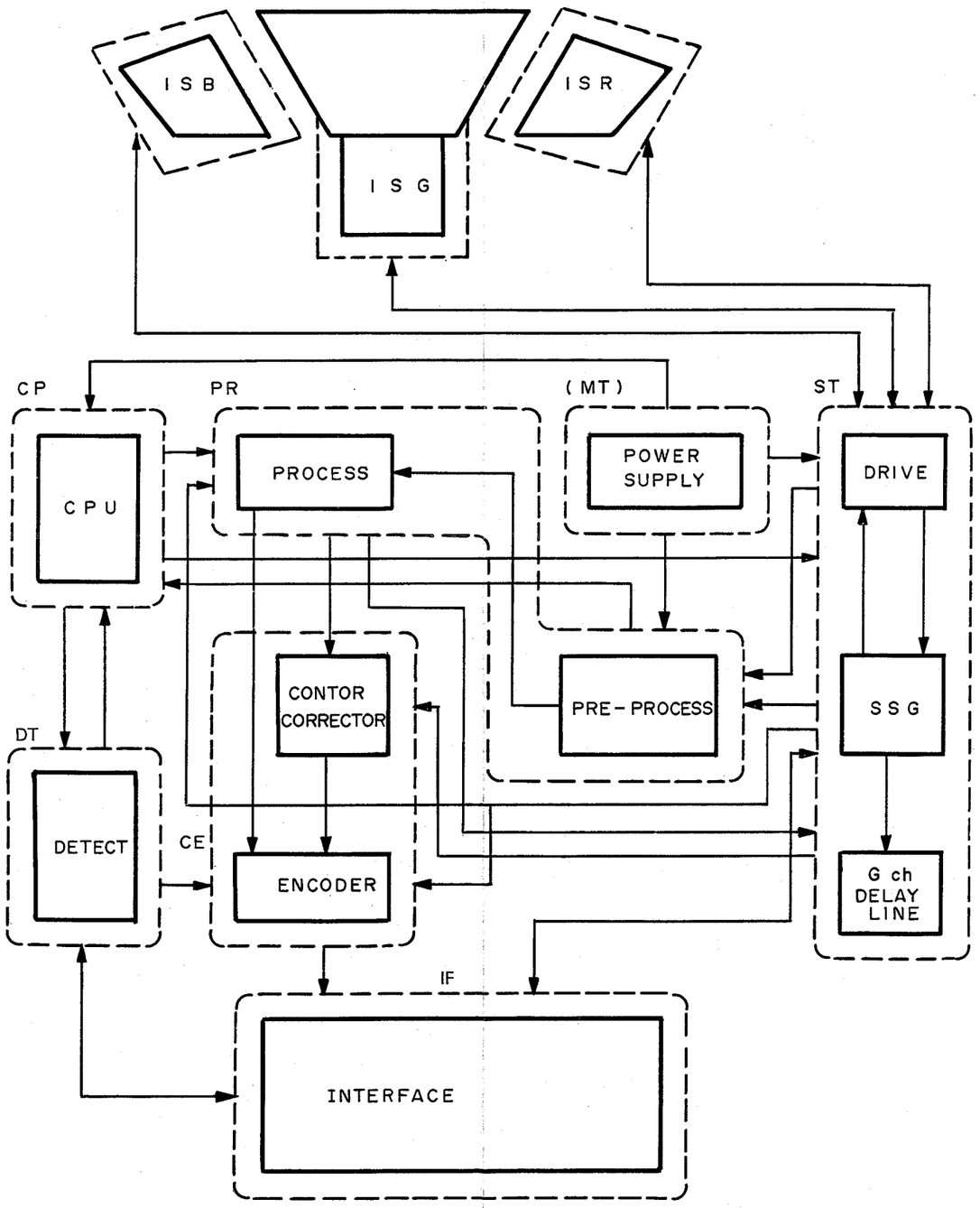
■ REPLACING SUBMINIATURE "CHIP" PARTS

- Some resistors, shorting jumpers (0 Ω resistance), ceramic capacitors, transistors, and diodes are chip parts. These chip parts cannot be reused after they are once removed.
- Chip resistors used in some circuits are of high precision type having little error in resistance.
  To demonstrate the full capacity of this camera head, place an order for proper parts referring to the diagrams and parts lists in the sections 5.
- Soldering cautions:
  1) Do not apply heat for more than 3 seconds.
  2) Avoid using a rubbing stroke when soldering.
  3) Discard removed chips; do not reuse them.
  4) Supplementary cementing is not required.
  5) Use care not to scratch or otherwise damage the chips.
- Polarities of chip electrolytic capacitors and chip tannalum capacitors used in this model are as illustrated below.
  Polarties indicated by silk-screen printing on circuit boards are also shown below. When replacing such parts, make sure of polarities.

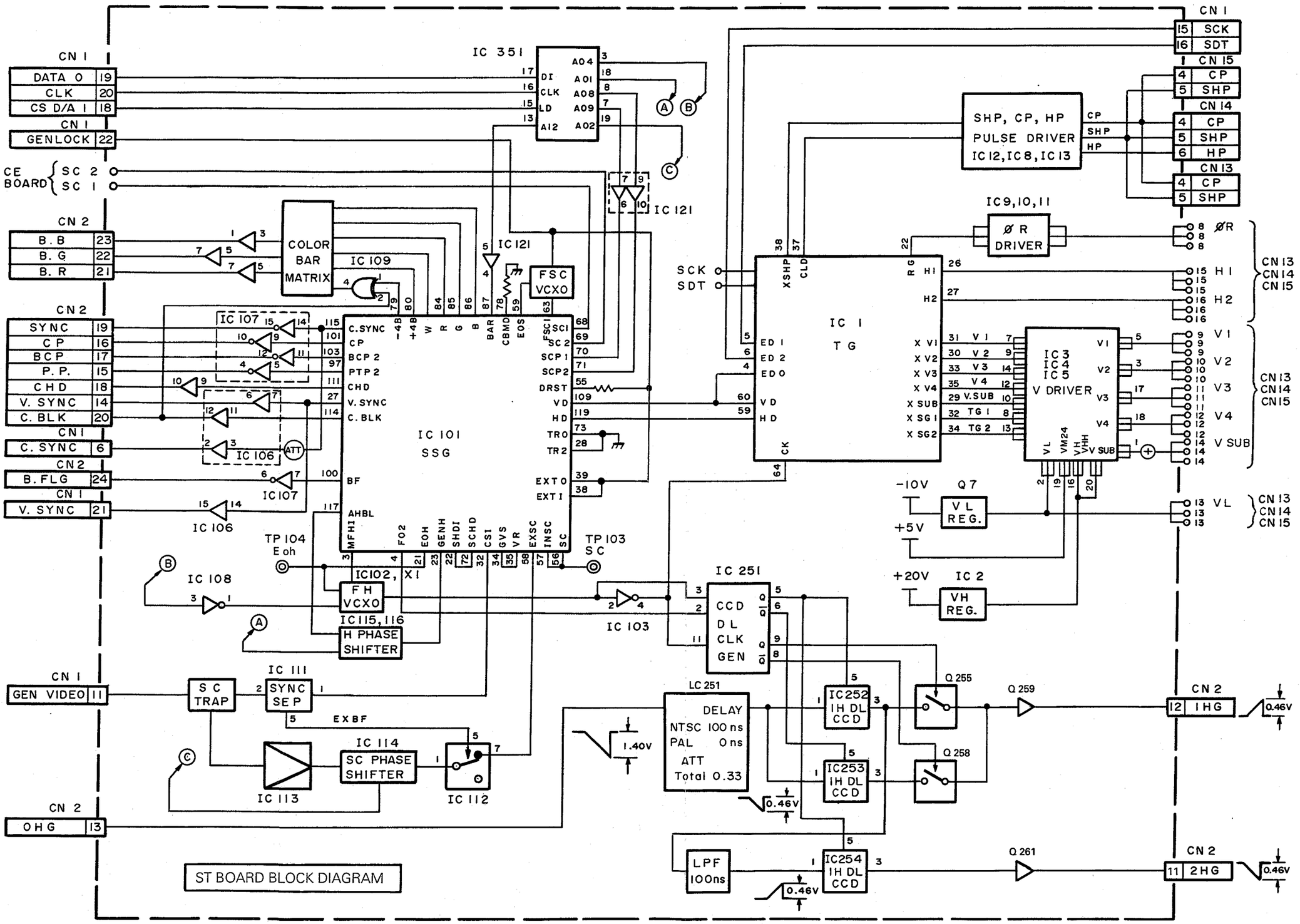
• Electrolytic capacitor • Non-polarized electrolytic capacitor • Tantalum capacitor



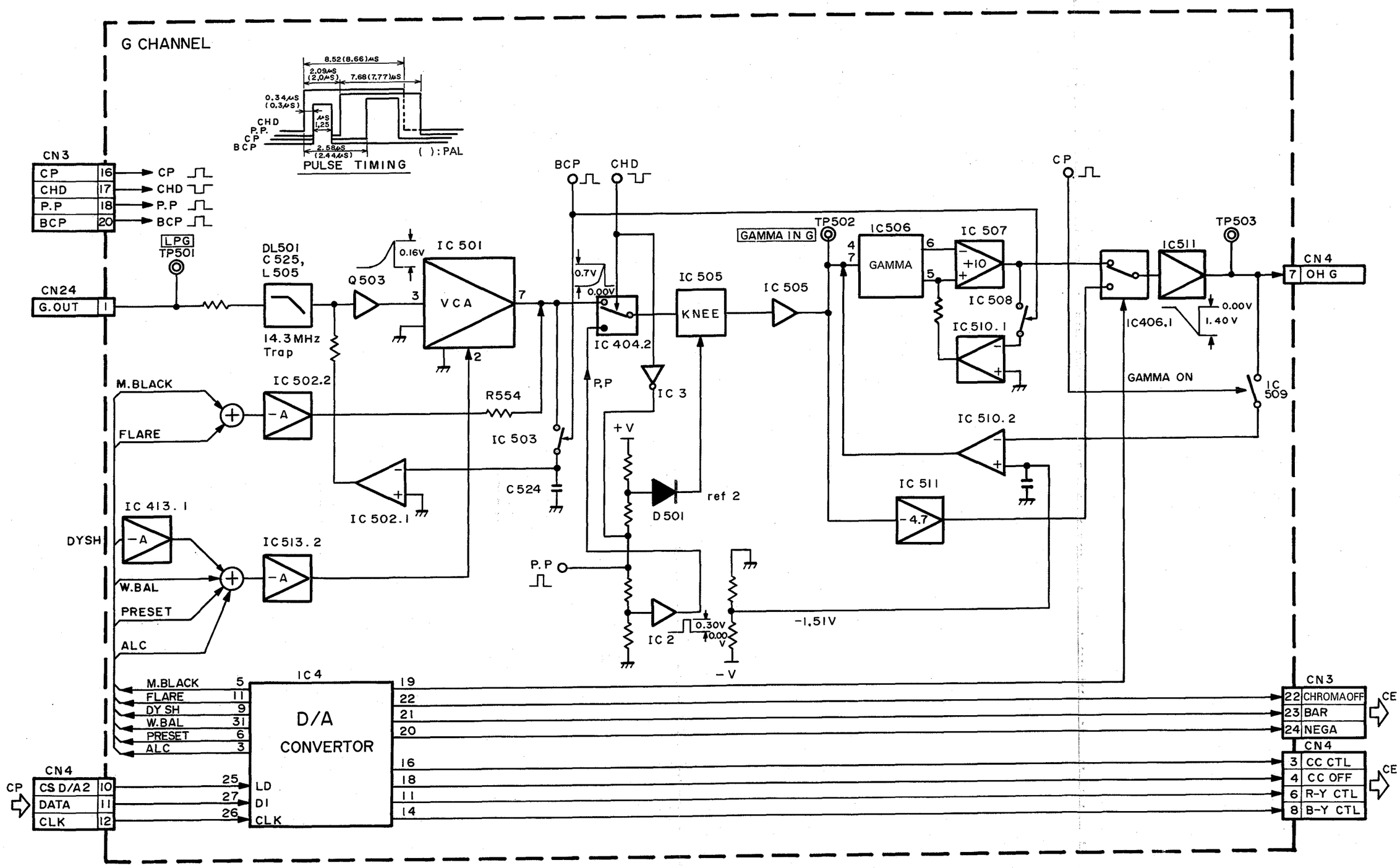
3.1 OVERALL BLOCK DIAGRAM



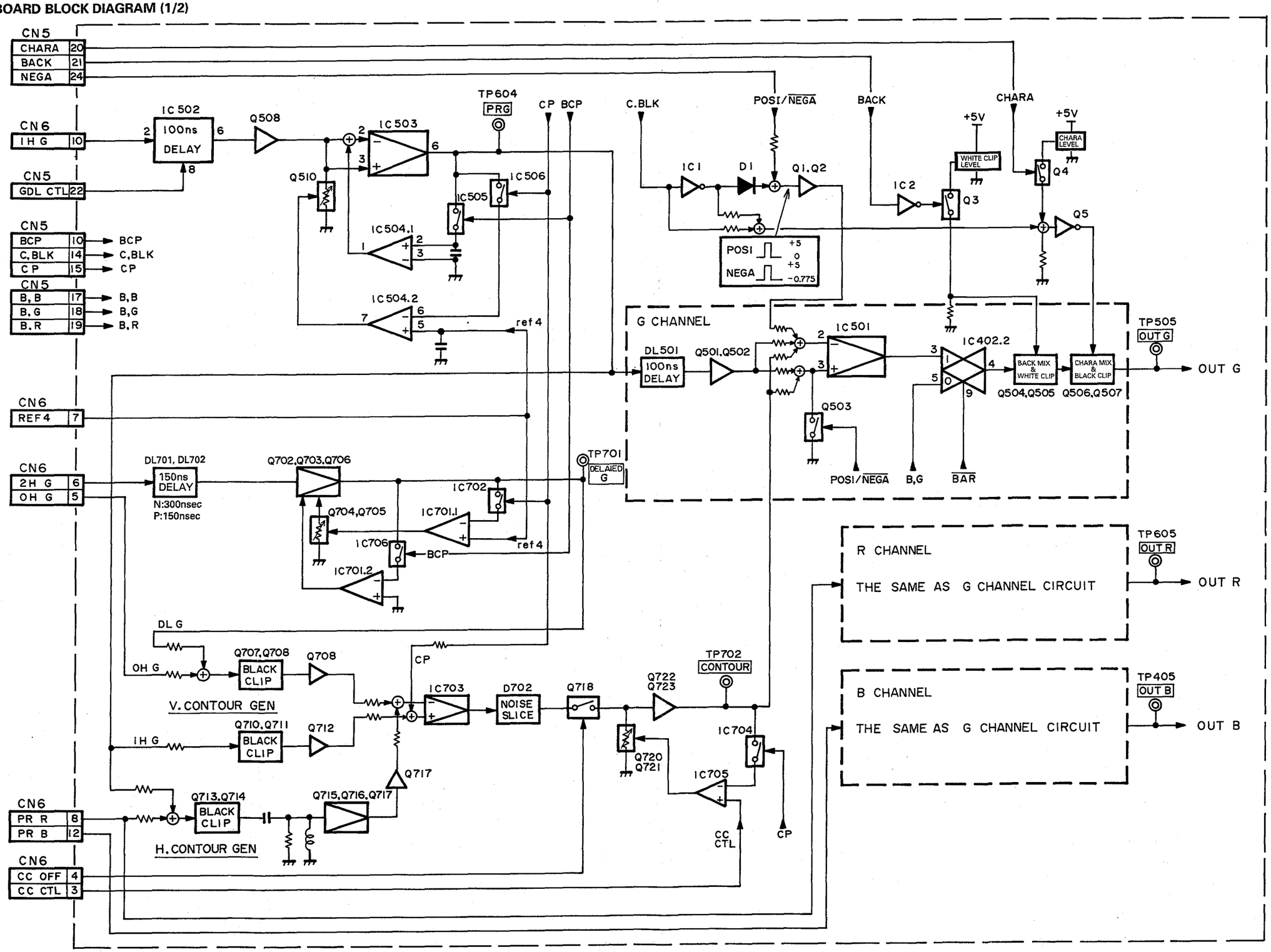
3.2 ST BOARD BLOCK DIAGRAM



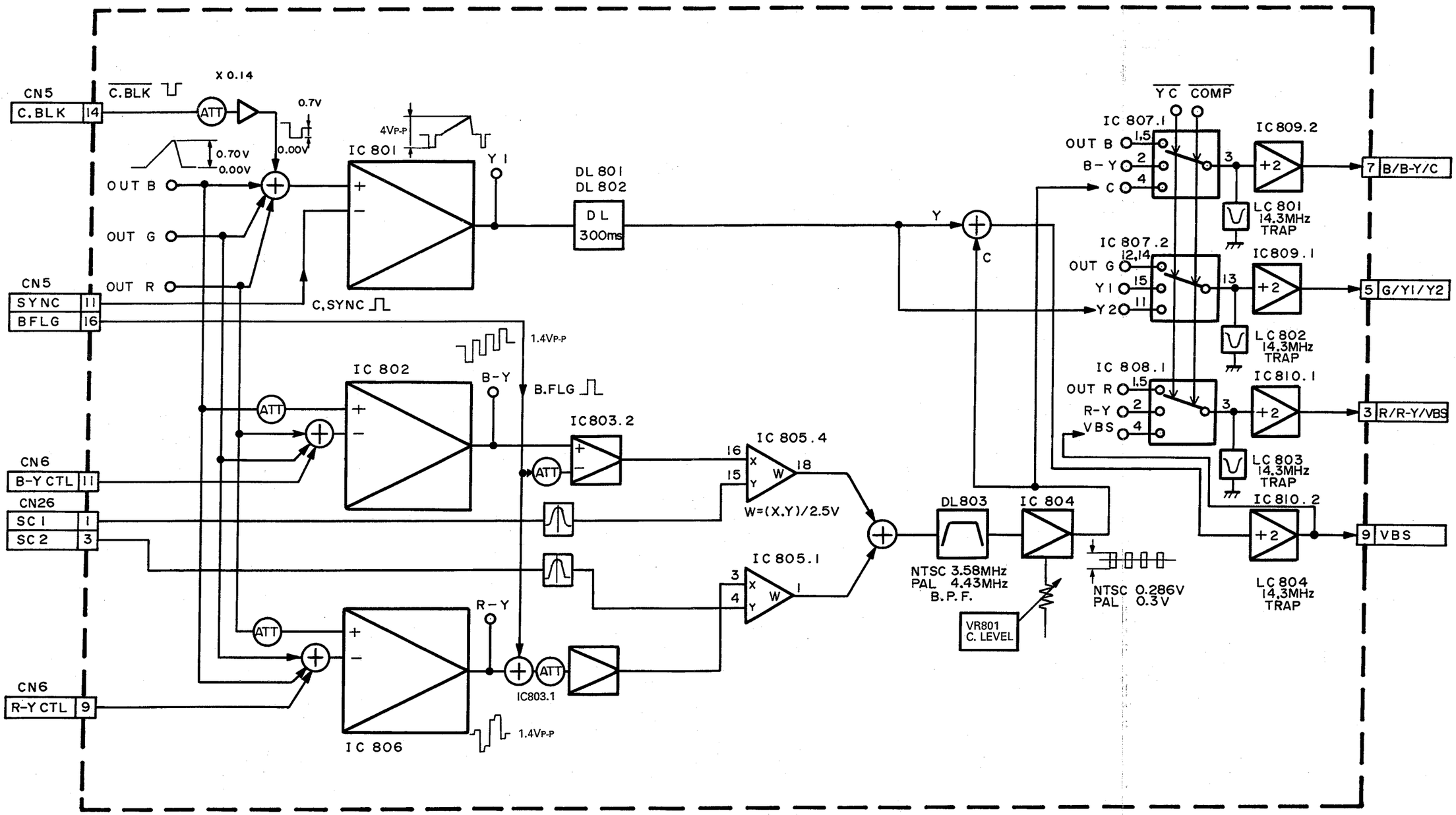
3.3 PR BOARD BLOCK DIAGRAM



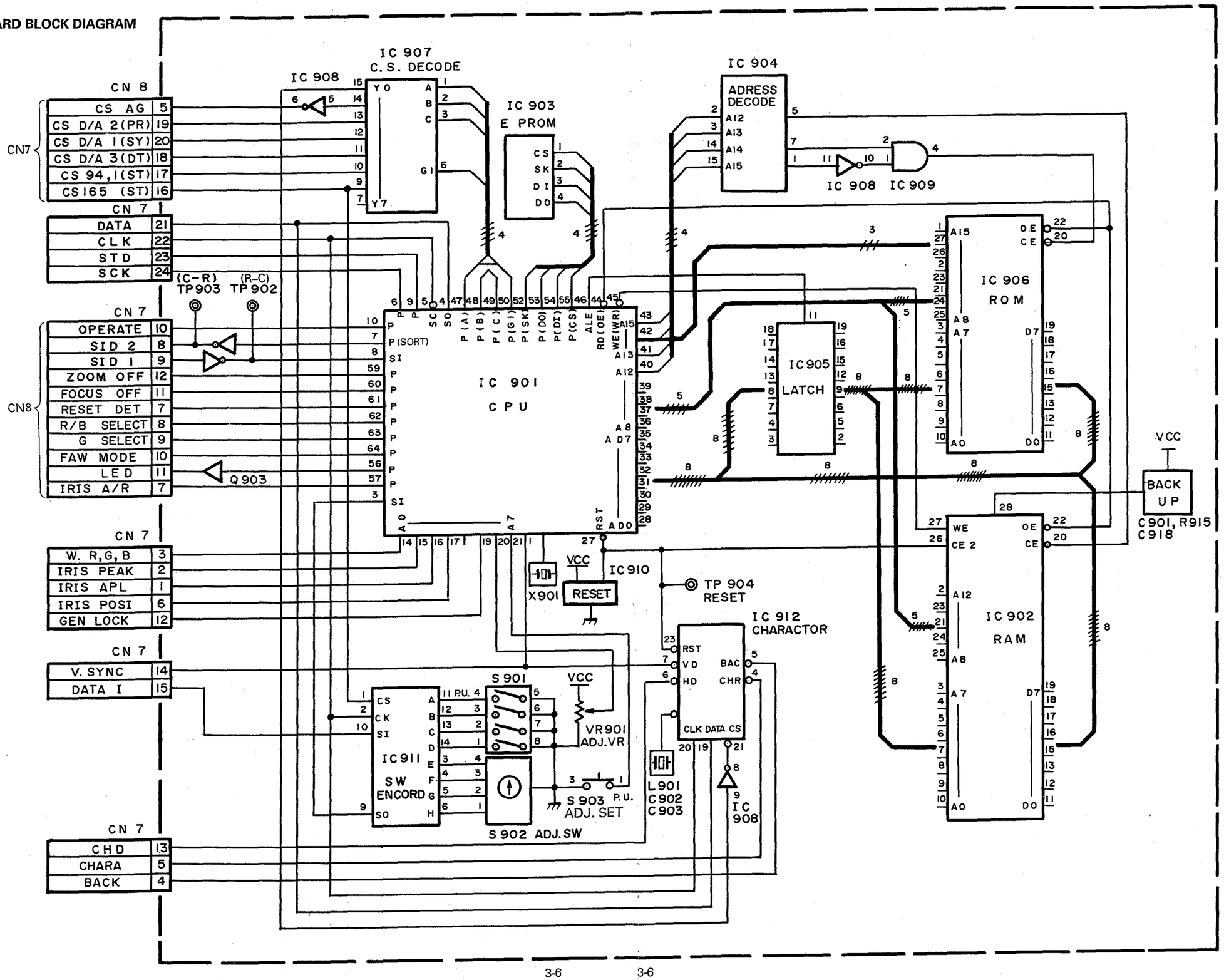
3.4 CE BOARD BLOCK DIAGRAM (1/2)



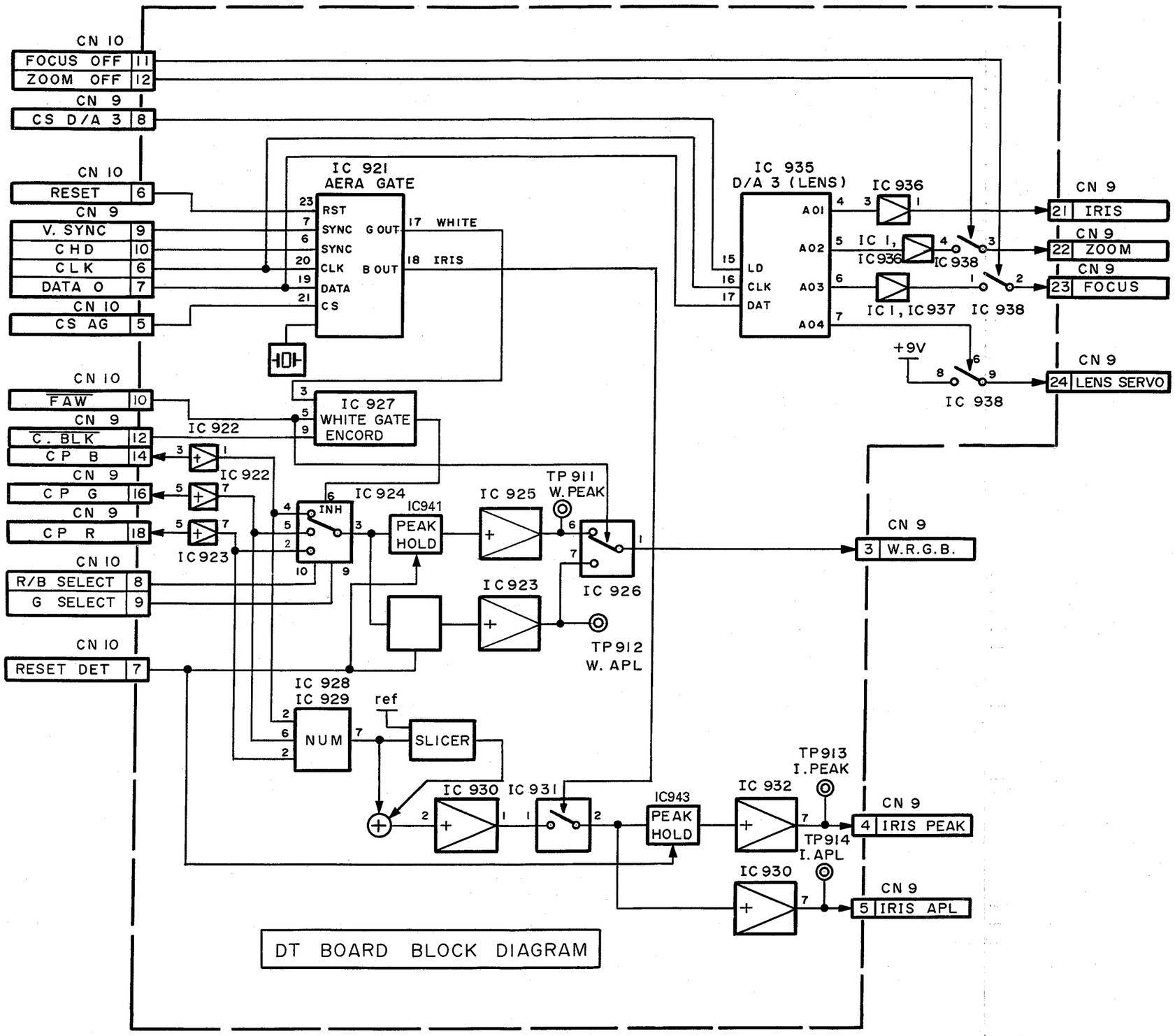
■ CE BOARD BLOCK DIAGRAM (2/2)



3.5 CP BOARD BLOCK DIAGRAM



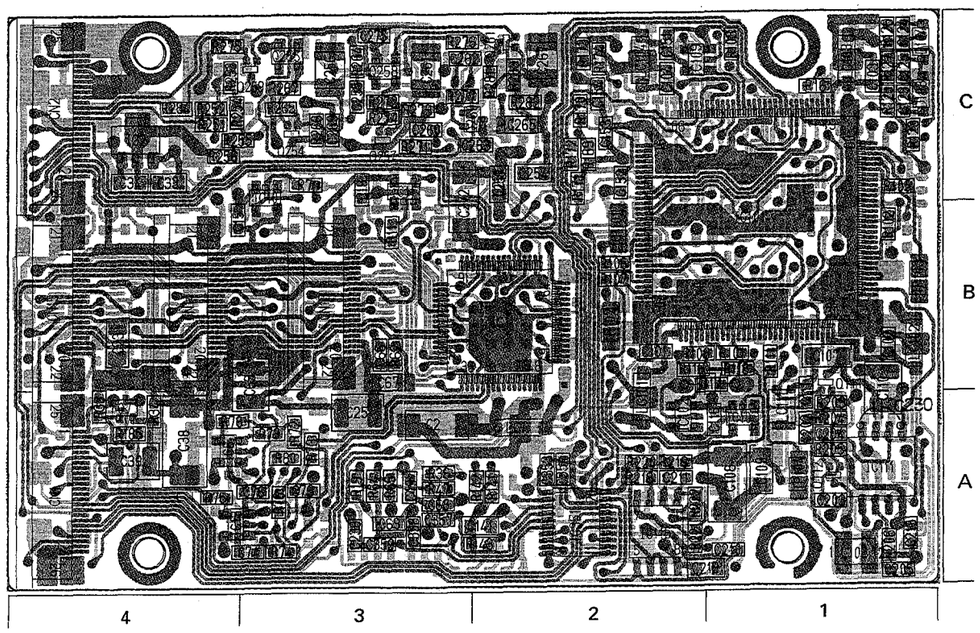
3.6 DT BOARD BLOCK DIAGRAM



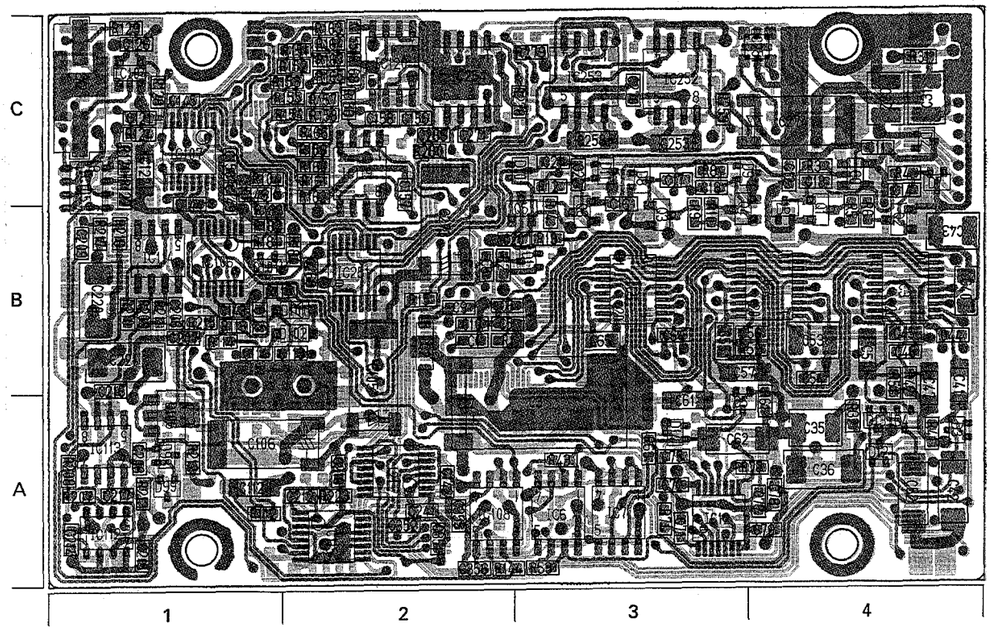
3-7

3.7 ST CIRCUIT BOARD

- Side A -



- Side B -

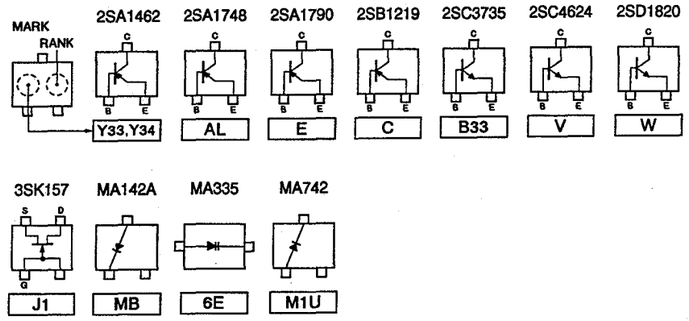


● ADDRESS TABLE OF BOARD PARTS

Each address may have an address error by one interval.

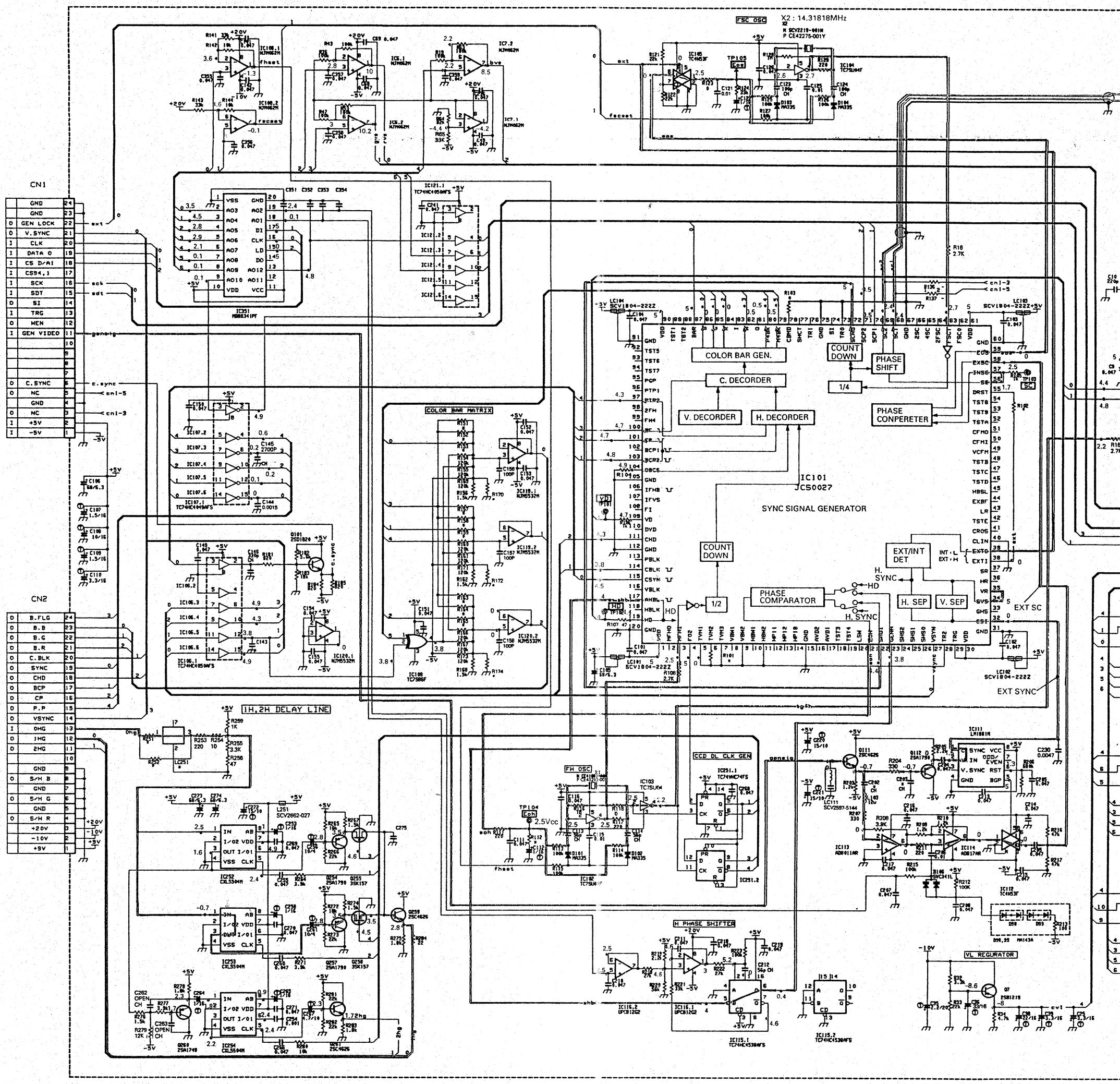
Side — A-1C — Y axis / X axis

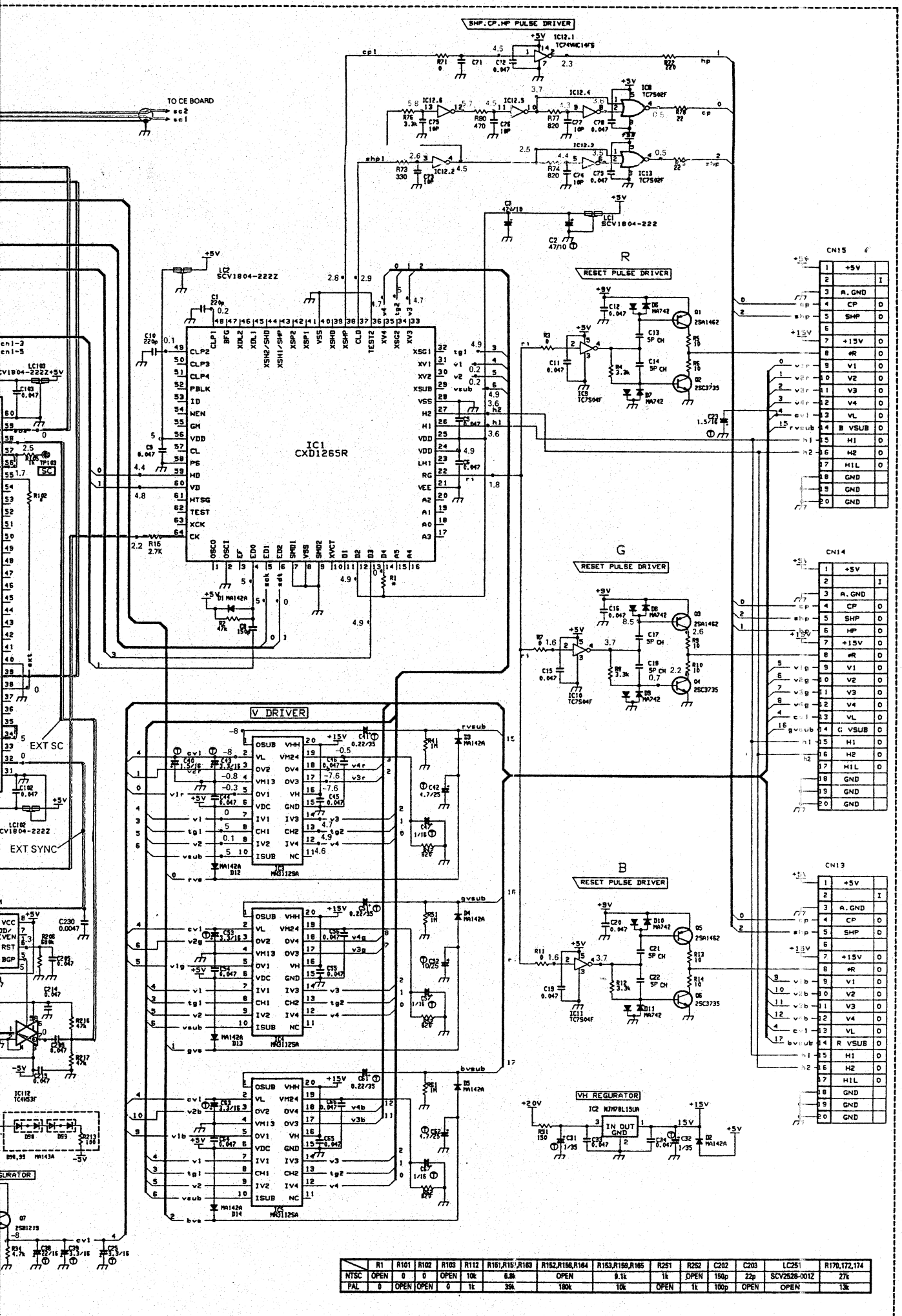
IC1	A-2B	Q7	A-4A	R10	B-3B	R111	A-1B	R173	A-2C	R276	A-3C	C43	B-4B	C113	B-2B	C219	B-2A	LC1	A-2A
IC2	A-4C	Q101	B-1B	R11	A-3B	R112	B-1A	R174	A-2C	R277	A-3C	C44	B-4B	C114	B-1B	C220	B-1B	LC2	B-2B
IC3	B-4B	Q111	A-1B	R12	B-3C	R113	B-1B	R181	B-1B	R278	B-3C	C45	B-4B	C115	B-1B	C221	B-1B		
IC4	B-4B	Q112	A-1A	R13	B-3B	R114	B-1B	R182	B-1B	R279	B-3C	C46	B-4B	C116	A-1A	C236	A-3A	X1	A-2B
IC5	B-3B	Q254	A-3C	R14	B-3B	R115	B-1B	R183	B-1B	R280	B-2C	C47	B-4A	C121	B-1C	C241	B-2A	X2	B-1C
IC6	B-3A	Q255	A-3C	R15	B-2B	R116	A-2B	R184	B-2B	R281	A-2C	C49	A-3A	C122	B-1C	C253	B-3C		
IC7	B-3A	Q257	A-3C	R16	A-1C	R117	A-1B	R185	A-4A	R282	A-2C	C51	B-4B	C123	A-1C	C254	A-2C	LC101	A-2A
IC8	A-4A	Q258	A-3C	R19	A-3A	R118	A-1B	R203	A-1A	R283	A-2C	C52	B-4A	C124	A-1C	C255	A-3C	LC102	A-1B
IC9	B-4C	Q259	A-3C	R31	B-4C	R121	B-1C	R204	A-1A	R284	A-4C	C53	B-4B	C125	A-1C	C256	A-3C	LC103	A-1C
IC10	A-3C	Q260	A-3C	R32	B-4A	R122	B-1C	R205	A-1A			C54	B-4B	C126	B-1C	C258	B-3C	LC104	A-2C
IC11	A-3C	Q261	A-2C	R33	A-4A	R123	A-1C	R206	A-1A	C1	B-2B	C55	B-3B	C141	A-2A	C260	A-3C	LC111	A-1A
IC12	B-3A			R34	A-4A	R124	B-1C	R207	B-1A	C2	A-3A	C56	B-4B	C142	B-2A	C261	A-3C	LC251	B-4C
IC13	A-4A	D1	B-3B	R36	A-3A	R125	A-1C	R208	B-1A	C3	B-3A	C57	B-4B	C143	B-1B	C262	A-3C		
IC101	A-1B	D2	B-4C	R41	B-4A	R126	A-1C	R209	B-1B	C5	B-2B	C61	B-3A	C144	B-1B	C263	A-3C	CN1	A-4A
IC102	A-2A	D3	B-4A	R42	B-4B	R127	A-1C	R210	B-1B	C6	B-2B	C62	B-3A	C145	B-1C	C265	A-2C	CN2	A-4C
IC103	A-1A	D4	B-4A	R43	B-3A	R128	B-1C	R211	B-1B	C8	B-2B	C63	A-3B	C146	B-1C	C266	B-2C	CN13	A-3B
IC104	B-1C	D5	B-4A	R47	A-3A	R129	B-1C	R212	B-1A	C9	B-2B	C64	B-3B	C149	B-1C	C267	A-2C	CN14	A-4B
IC105	B-1C	D6	B-4B	R51	B-4B	R141	A-2A	R213	B-1A	C10	B-2B	C65	B-3B	C150	B-1C	C268	B-2B	CN15	A-4B
IC106	B-1B	D7	B-4C	R52	B-4B	R142	A-3A	R215	B-1B	C11	B-4C	C66	A-3B	C151	A-2C	C269	A-3C		
IC107	B-1C	D8	B-3C	R53	B-3A	R143	A-2A	R216	B-1B	C12	B-4C	C67	A-3B	C152	A-2C	C270	B-3C		
IC108	B-3A	D9	B-4C	R61	B-4A	R144	B-2A	R217	B-1B	C13	B-4C	C68	A-3A	C153	A-2C	C271	B-2C		
IC109	A-2C	D10	B-3C	R62	A-3B	R151	B-2C	R218	A-2A	C14	B-4C	C69	A-3A	C154	A-2C	C272	A-3C		
IC111	A-1A	D11	B-3C	R63	B-3A	R152	B-2C	R219	A-2A	C15	A-4B	C71	B-3A	C155	B-2C	C273	B-2B		
IC112	B-1A	D12	B-4A	R64	A-3A	R153	B-2C	R220	A-2A	C16	B-3B	C72	B-3A	C156	B-2C	C274	B-4C		
IC113	B-1A	D13	B-4A	R65	A-3A	R154	B-2C	R221	A-2A	C17	B-3C	C73	A-3A	C157	B-2C	C275	A-3C		
IC114	B-1B	D14	B-3A	R71	B-3A	R155	B-2C	R222	A-2A	C18	B-3C	C74	A-3A	C158	B-2C	C351	B-2A		
IC115	B-2A	D98	B-1A	R72	A-3A	R156	B-2C	R223	B-2A	C19	A-3C	C75	B-3A	C202	A-1A	C352	B-2A		
IC116	A-2A	D99	B-1A	R73	A-3A	R157	B-2C	R251	A-4C	C20	B-3B	C76	A-3A	C203	A-1A	C353	A-2A		
IC119	B-2C	D101	B-2B	R74	A-3A	R158	B-2C	R252	A-4C	C21	B-3C	C77	B-4A	C204	A-1A	C354	A-2A		
IC120	B-2C	D102	B-2B	R75	A-4A	R159	B-2C	R253	A-4C	C22	B-3C	C78	B-4A	C205	A-1A	C355	B-2A		
IC121	B-2A	D103	A-1C	R76	A-3A	R160	B-2C	R254	A-4C	C23	A-4B	C79	B-4A	C206	B-1B	C356	B-2A		
IC251	B-2B	D104	A-1C	R77	B-4A	R161	B-2C	R255	A-4C	C25	A-3A	C101	A-2B	C207	B-1B	C357	A-3A		
IC252	B-3C	D106	B-1A	R78	A-4A	R162	B-2C	R256	A-4C	C31	B-4C	C102	A-1B	C208	B-1A	C358	A-3A		
IC253	B-3C			R79	A-3A	R163	B-2C	R259	B-3C	C32	B-4C	C103	A-1C	C209	B-1B	C359	A-3A		
IC254	B-2C	R1	B-2B	R80	A-3A	R164	B-2C	R264	A-3C	C33	A-4C	C104	A-2C	C210	A-1A				
IC351	A-2A	R2	B-2B	R101	A-1B	R165	B-2C	R265	A-3C	C34	A-4C	C105	B-2B	C211	A-2A	L103	A-1A		
		R3	B-4C	R102	A-1B	R166	B-2C	R266	A-3C	C35	B-4A	C106	B-1A	C212	B-2A	L251	A-2C		
Q1	B-4B	R4	B-4C	R103	A-1C	R167	B-2C	R267	A-3C	C36	B-4A	C107	A-1B	C213	A-1A				
Q2	B-4B	R5	B-4B	R104	B-1C	R168	B-2C	R271	A-3C	C38	A-4A	C108	A-1A	C214	B-1A	TP101	A-2B		
Q3	B-3B	R6	B-4B	R105	A-1C	R169	A-2C	R272	A-3C	C39	A-4A	C109	A-1A	C215	B-1A	TP102	A-2B		
Q4	B-4B	R7	A-3C	R106	A-2B	R170	A-2C	R273	A-3C	C40	B-4B	C110	A-1A	C216	B-1A	TP103	A-1B		
Q5	B-3B	R8	B-3C	R107	A-2B	R171	A-2C	R274	A-3C	C41	B-4A	C111	A-1A	C217	B-1A	TP104	A-1A		
Q6	B-3B	R9	B-3B	R108	A-2B	R172	A-2C	R275	A-4C	C42	B-4A	C112	B-1A	C218	A-2A				



3-8

3.8 ST BOARD SCHEMATIC DIAGRAM





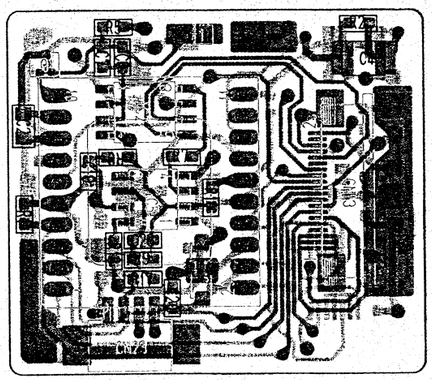
	R1	R101	R102	R103	R112	R151,R157,R163	R152,R158,R164	R153,R159,R165	R251	R252	C202	C203	LC251	R170,172,174
NTSC	OPEN	0	0	OPEN	10k	6.8k	OPEN	9.1k	1k	OPEN	150p	22p	SCV2526-001Z	27k
PAL	0	OPEN	OPEN	0	1k	39k	180k	10k	OPEN	1k	100p	OPEN	OPEN	13k

91127

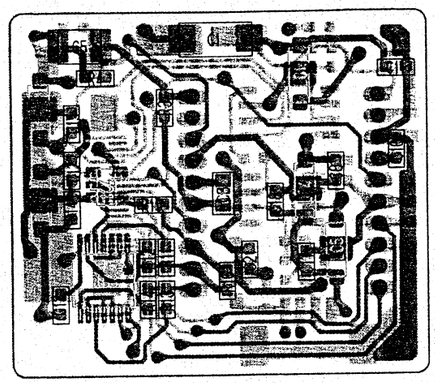
3.9 ISB/ISG/ISR CIRCUIT BOARD

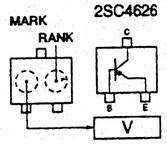
● ISB board

– Side A –



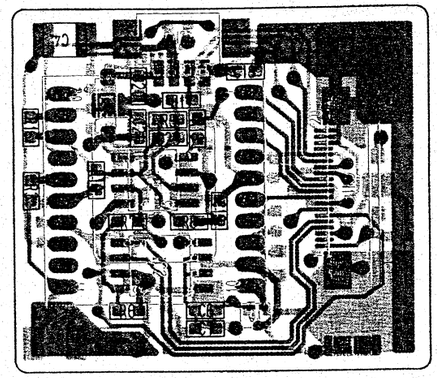
– Side B –

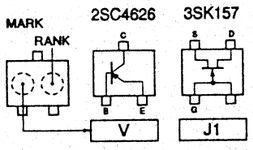




● ISG board

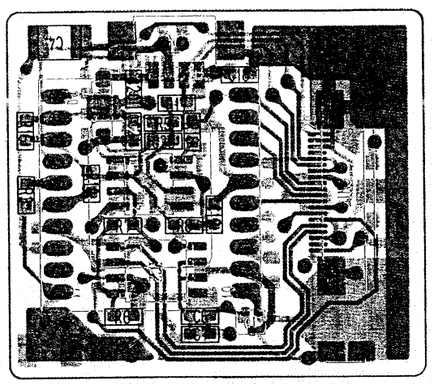
– Side A –



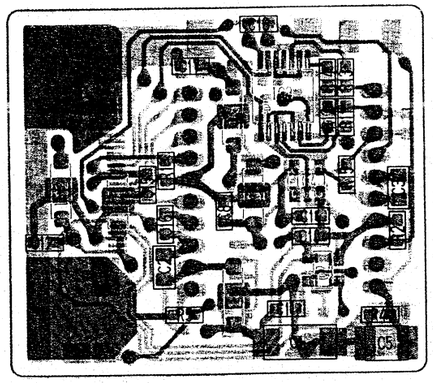


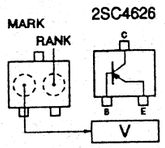
● ISR board

– Side A –



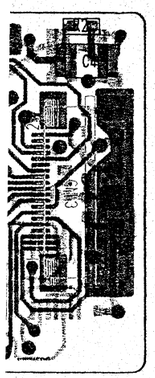
– Side B –

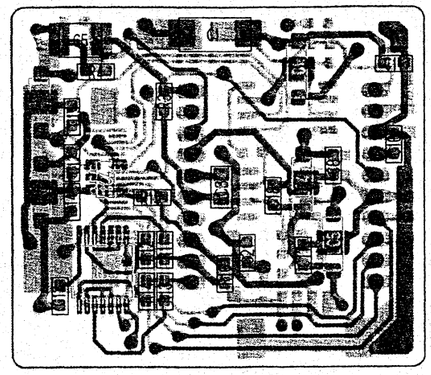


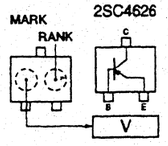


● ISG board

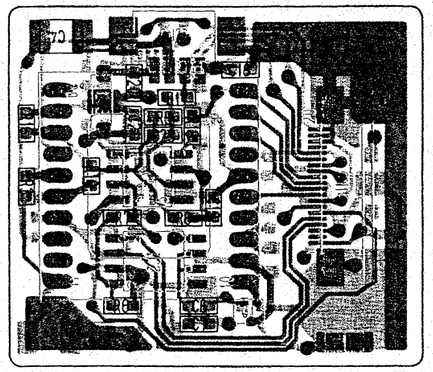
– Side B –

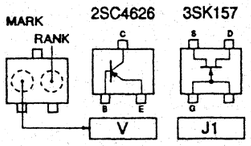




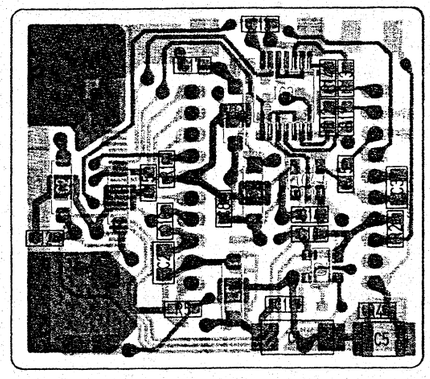


– Side A –

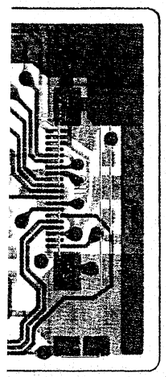


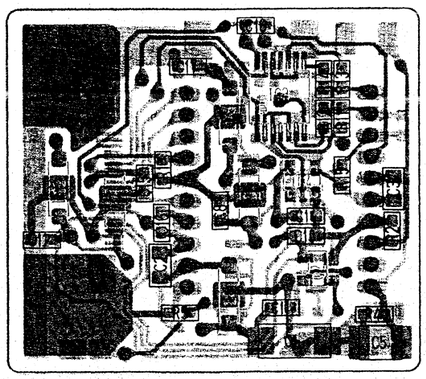


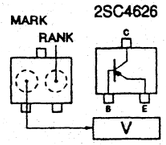
– Side B –



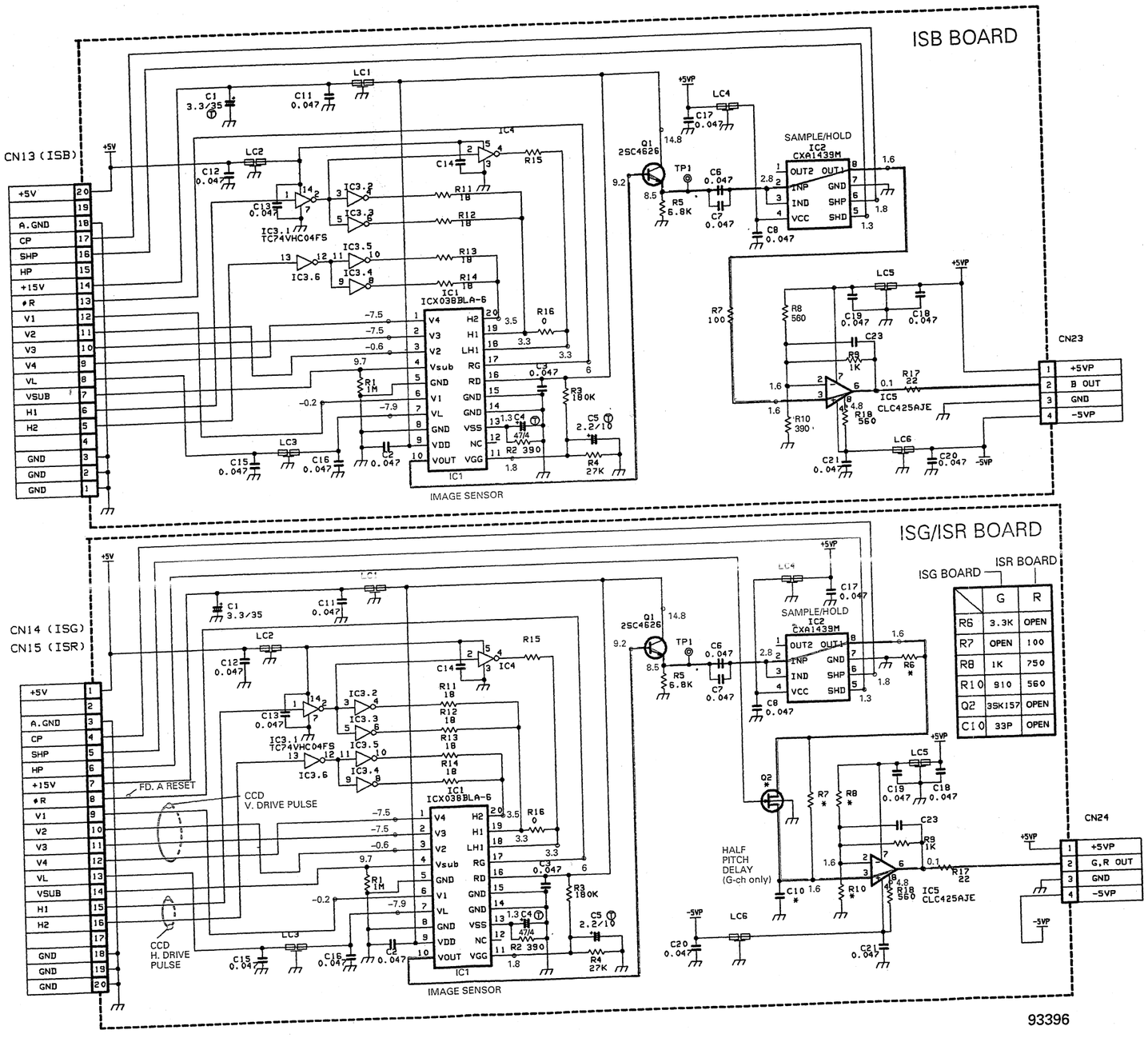
– Side B –







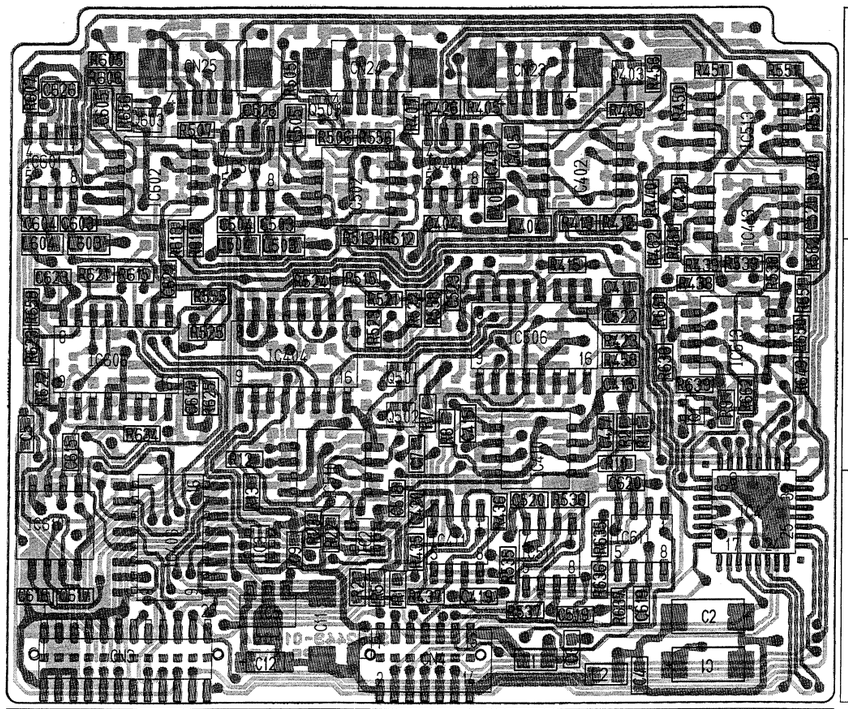
3.10 ISB/ISG/ISR SCHEMATIC DIAGRAM



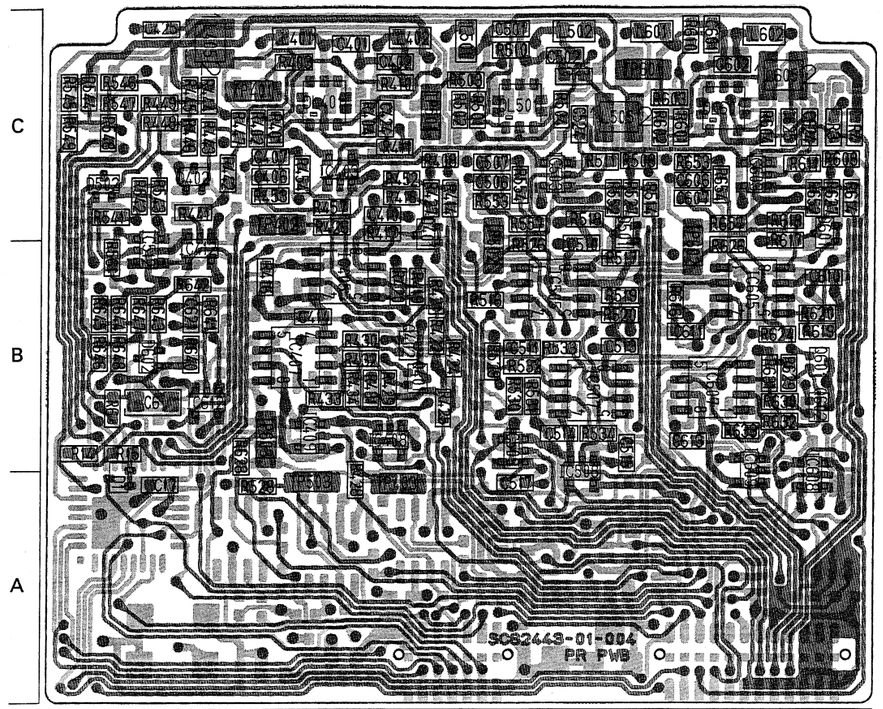
3-11

3.11 PR CIRCUIT BOARD

- Side A -



- Side B -

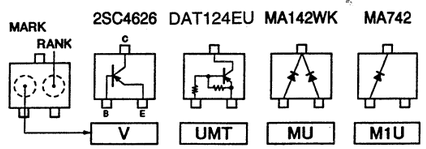


● ADDRESS TABLE OF BOARD PARTS

Each address may have an address error by one interval.

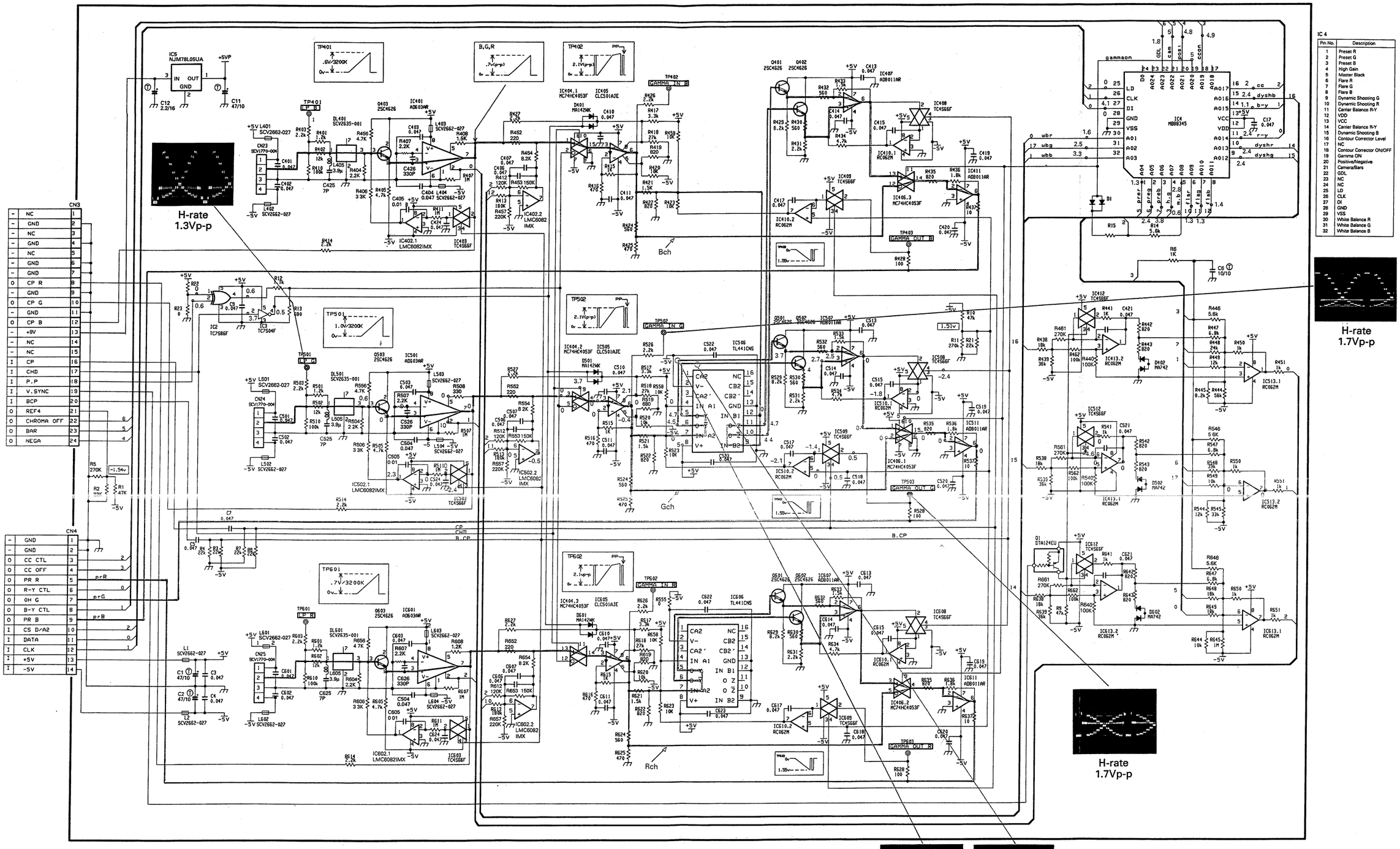
Side — A–1C — Y axis / X axis

IC2	A–2A	IC610	A–3A	R14	B–1B	R434	B–2B	R513	A–2B	R550	A–1C	R628	B–1B	C5	A–3B	C515	B–3B	L402	B–2C
IC3	A–3A	IC611	A–1A	R15	B–1B	R435	A–2A	R514	B–3C	R551	A–1C	R629	B–3B	C6	B–1B	C517	B–2A	L403	A–2C
IC4	A–1A	IC612	B–1B	R21	A–1B	R436	A–2A	R515	A–2B	R552	B–3C	R630	B–3B	C7	A–2B	C518	A–2A	L404	A–2C
IC5	A–3A	IC613	A–1B	R22	A–2A	R437	A–2A	R516	B–2B	R553	B–2C	R631	B–3B	C9	A–2A	C519	A–1A	L405	B–1C
IC401	A–2C			R23	A–2A	R438	A–1B	R517	B–3B	R554	B–2C	R632	B–3B	C11	A–2A	C520	A–2A	L501	B–2C
IC402	A–1C	Q1	A–1B	R401	B–1C	R439	A–1B	R518	B–2C	R555	A–3B	R633	B–3B	C12	A–3A	C521	A–1C	L502	B–2C
IC403	B–2C	Q401	B–2B	R402	B–1C	R440	A–1C	R519	B–3B	R556	A–2C	R634	A–3B	C17	B–1A	C522	A–1B	L503	A–3B
IC404	A–2B	Q402	B–2B	R403	B–1C	R441	B–1C	R520	B–3B	R557	B–2C	R635	A–1A	C401	B–2C	C523	A–2B	L504	A–3B
IC405	B–2B	Q403	A–1C	R404	B–2C	R442	B–1C	R521	A–2B	R558	A–2B	R636	A–1A	C402	B–2C	C524	B–2C	L505	B–3C
IC406	A–3A	Q501	A–2B	R405	A–2C	R443	B–1C	R522	A–2B	R561	B–1B	R637	A–1A	C403	A–2C	C525	B–2C	L601	B–3C
IC407	B–1B	Q502	A–2B	R406	A–1C	R444	B–1C	R523	A–2B	R562	A–1B	R638	A–1B	C404	A–2C	C526	A–3C	L602	B–3C
IC408	B–2B	Q503	A–2C	R407	A–2C	R445	B–1C	R524	A–2B	R601	B–3C	R639	A–1B	C405	A–2C	C601	B–3C	L603	A–3B
IC409	B–1B	Q601	B–3B	R408	B–2C	R446	B–1C	R525	A–3B	R602	B–3C	R640	B–1B	C406	B–1C	C602	B–3C	L604	A–3B
IC410	A–2B	Q602	B–3B	R410	B–2C	R447	B–1C	R526	B–2B	R603	B–3C	R641	B–1B	C407	B–1C	C603	A–3C	L605	B–3C
IC411	A–2A	Q603	A–3C	R411	B–2C	R448	B–1C	R527	B–3C	R604	B–3C	R642	B–1B	C410	B–2C	C604	A–3C		
IC412	B–1B			R412	A–1C	R449	B–1C	R528	B–1A	R605	A–3C	R643	B–1B	C411	A–1B	C605	A–3C	DL401	B–2C
IC413	A–1C	D1	B–1A	R413	A–1C	R450	A–1C	R529	B–2B	R606	A–3C	R644	B–1B	C413	A–1B	C606	B–3C	DL501	B–2C
IC501	A–3C	D401	B–2C	R414	B–2C	R451	A–1C	R530	B–2B	R607	A–3C	R645	B–1B	C414	B–1B	C607	B–3C	DL601	B–3C
IC502	A–2C	D402	B–1C	R415	A–2B	R452	B–2C	R531	B–2B	R608	B–3C	R646	B–1B	C415	A–2B	C610	B–3B		
IC503	B–2C	D501	B–3C	R416	B–1B	R453	B–1C	R532	B–2B	R610	B–3C	R647	B–1B	C417	A–1B	C611	B–3B	TP401	B–1C
IC505	B–2B	D502	B–1C	R417	B–2C	R454	B–1C	R533	B–2B	R611	B–3C	R648	B–1B	C419	A–2A	C613	B–3B	TP402	B–1C
IC506	A–1B	D601	B–3C	R418	B–2C	R456	A–1C	R534	B–3B	R612	A–3B	R649	A–1B	C420	A–2A	C614	A–3B	TP403	B–2A
IC507	B–3B	D602	B–1B	R419	B–2B	R457	B–2C	R535	A–2A	R613	A–3B	R650	A–1B	C421	A–1C	C615	A–3B	TP501	B–2C
IC508	B–2A			R420	B–2B	R458	A–1B	R536	A–2A	R614	B–3C	R651	A–1B	C424	B–2C	C617	A–3A	TP502	B–2B
IC509	B–2B	R1	A–2A	R421	B–2B	R461	A–1B	R537	A–2A	R615	A–3B	R652	B–3C	C425	B–1C	C618	A–3A	TP503	B–1A
IC510	A–2B	R2	A–2A	R422	B–2B	R462	A–1B	R538	A–1B	R616	B–3B	R653	B–3C	C426	A–2C	C619	A–1A	TP601	B–3C
IC511	A–1A	R3	B–3C	R423	A–1B	R501	B–2C	R539	A–1B	R617	B–3B	R654	B–3C	C501	B–2C	C620	A–1A	TP602	B–3B
IC512	B–1B	R4	B–3C	R424	B–2B	R502	B–2C	R540	A–1C	R618	B–3C	R656	A–3C	C502	B–2C	C621	B–1B	TP603	B–1B
IC513	A–1C	R5	A–2A	R425	B–2B	R503	B–2C	R541	B–1C	R619	B–3B	R657	B–3C	C503	A–3C	C622	A–3B		
IC601	A–3C	R6	B–1B	R426	B–2C	R504	B–2C	R542	B–1C	R620	B–3B	R658	A–3B	C504	A–3C	C623	A–3B	CN3	A–3A
IC602	A–3C	R7	A–2B	R427	B–2C	R505	A–3C	R543	B–1C	R621	A–3B	R661	A–1B	C505	A–3C	C624	B–3C	CN4	A–2A
IC603	B–3C	R8	A–2B	R428	B–2A	R506	A–2C	R544	B–1C	R622	A–3B	R662	A–1B	C506	B–2C	C625	B–3C	CN23	A–2C
IC605	B–3B	R9	A–1B	R429	B–2B	R507	A–3C	R545	B–1C	R623	A–3B			C507	B–2C	C626	A–3C	CN24	A–2C
IC606	A–3B	R10	A–1B	R430	B–2B	R508	B–3C	R546	B–1C	R624	B–3B	C1	A–1A	C510	B–2B			CN25	A–3C
IC607	B–3B	R11	A–1B	R431	B–2B	R510	B–2C	R547	B–1C	R625	A–3B	C2	A–1A	C511	B–2B	L1	A–2A		
IC608	B–3A	R12	A–3B	R432	B–2B	R511	B–3C	R548	B–1C	R626	B–3B	C3	A–1A	C513	B–3B	L2	A–1A		
IC609	B–3A	R13	A–3A	R433	B–2B	R512	A–2B	R549	B–1C	R627	B–3C	C4	A–1A	C514	B–2B	L401	B–1C		



3-12

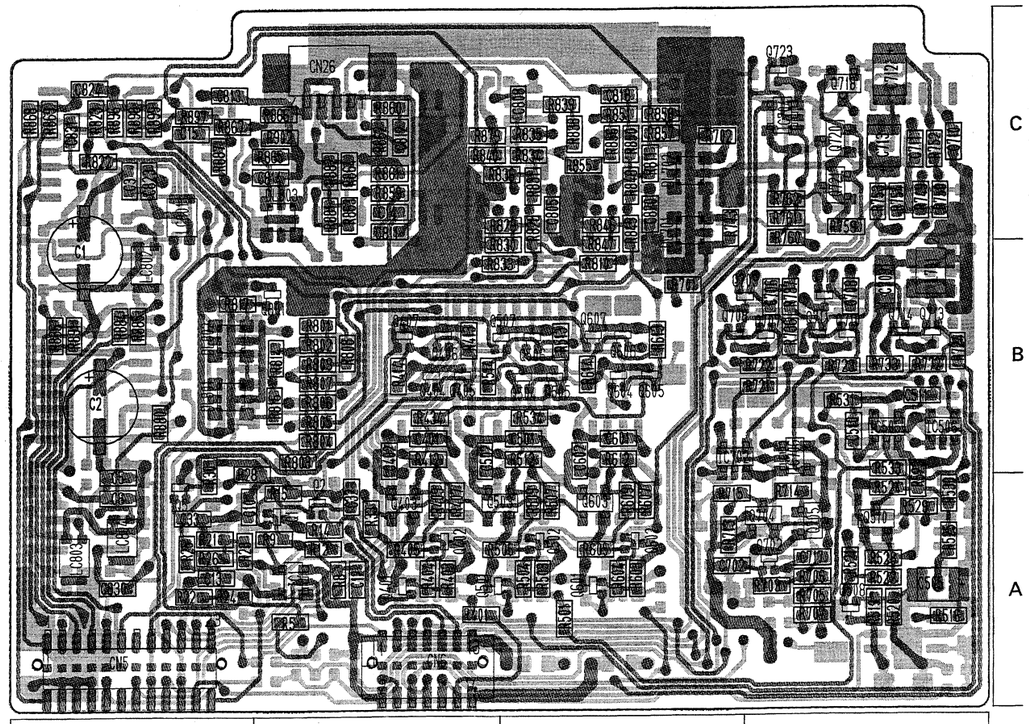
3.12 PR BOARD SCHEMATIC DIAGRAM



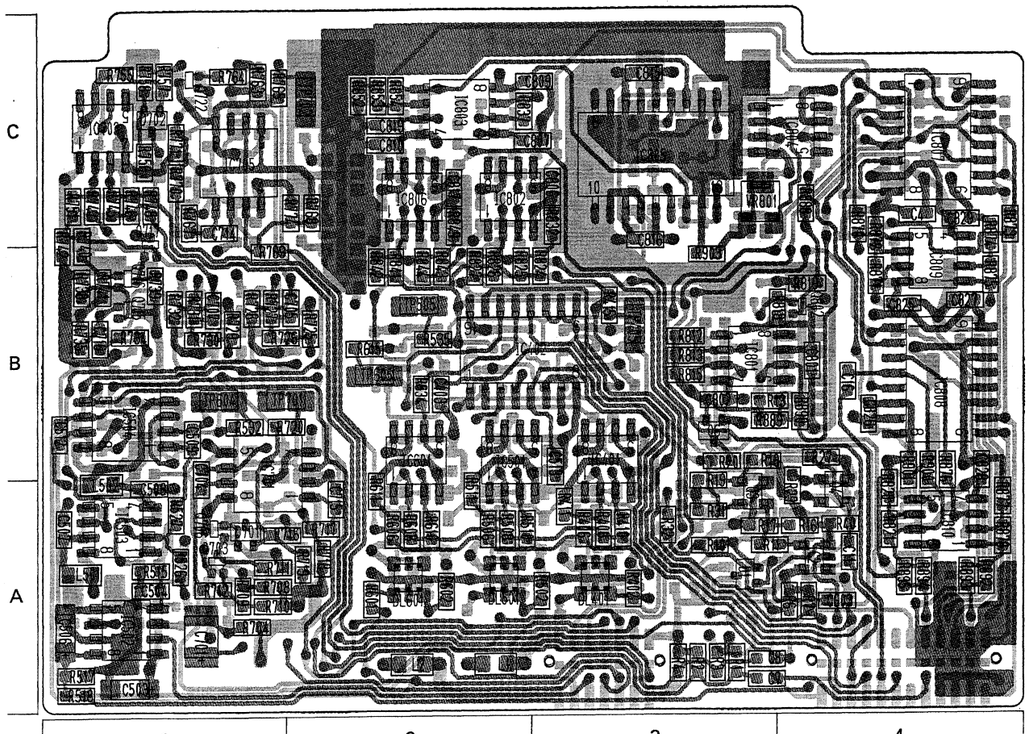
IC 4	
Pin No.	Description
1	Preset R
2	Preset G
3	Preset B
4	High Gain
5	Master Black
6	Flare R
7	Flare G
8	Flare B
9	Dynamic Shooting G
10	Dynamic Shooting R
11	Carrier Balance R-Y
12	VDD
13	VCC
14	Carrier Balance R-Y
15	Dynamic Shooting B
16	Contour Corrector Level
17	NC
18	Contour Corrector ON/OFF
19	Gamma ON
20	Positive/Negative
21	Camera/Bars
22	GDL
23	NC
24	NC
25	LD
26	CLK
27	DI
28	GND
29	VSS
30	White Balance R
31	White Balance G
32	White Balance B

3.13 CE CIRCUIT BOARD

- Side A -



- Side B -



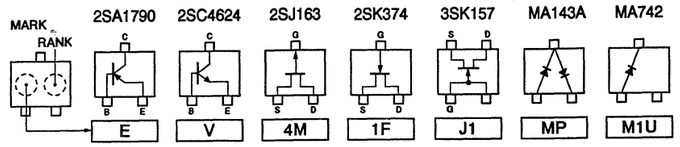
● ADDRESS TABLE OF BOARD PARTS

Each address may have an address error by one interval.

Side — A–1C — Y axis / X axis

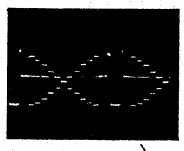
IC1	A–3A	Q402	A–3A	Q715	B–1B	R21	A–4A	R506	B–2A	R606	B–2A	R725	B–2B	R762	A–1C	R824	B–3B	R859	A–3C	R895	B–4A	C504	B–1A	C809	B–3C	DL803	A–3C
IC2	B–4A	Q403	A–3A	Q716	B–1B	R22	A–4A	R507	A–2A	R607	A–2A	R726	B–1B	R763	B–1C	R825	B–2B	R860	A–3C	R896	A–4C	C505	A–1A	C810	B–2C		
IC401	B–3B	Q404	A–3B	Q717	B–1B	R23	A–4A	R508	B–2A	R608	B–2A	R727	B–1B	R764	B–1C	R826	B–2B	R861	A–3C	R897	A–4C	C506	B–1A	C811	A–3C	TP405	B–3B
IC402	B–2B	Q405	A–3B	Q718	A–1C	R24	A–4A	R509	A–2A	R609	A–2A	R728	B–1B	R765	B–1C	R827	B–2B	R862	A–3C	R898	A–4C	C507	B–1A	C812	A–3C	TP505	B–2B
IC501	B–2B	Q406	A–3B	Q720	A–1C	R25	A–4A	R510	B–3A	R610	B–2A	R729	B–1B	R767	B–1C	R828	A–2C	R863	A–3C	R899	A–4C	C508	B–1A	C813	A–4C	TP604	B–1B
IC502	B–1A	Q407	A–3B	Q721	A–1C	R26	A–4A	R511	B–2A	R611	B–2A	R730	B–1B	R768	B–2C	R829	A–3C	R864	A–3C	R900	B–4B	C509	B–1B	C814	A–3C	TP605	B–2B
IC503	B–1A	Q501	A–3A	Q722	B–1C	R27	B–4B	R512	A–2B	R612	A–2B	R731	B–1B	R769	B–1B	R830	A–3B	R865	A–3C	R901	B–4B	C510	A–1B	C815	B–3C	TP701	B–2B
IC504	B–1B	Q502	A–2A	Q723	A–1C	R28	A–4B	R513	A–2B	R613	A–2B	R732	B–1B	R770	B–1C	R831	A–2C	R866	A–3C	R902	A–3C	C511	A–1B	C816	B–3B	TP702	B–2C
IC505	A–1B	Q503	A–3A	Q801	A–3B	R29	B–4A	R514	A–3B	R614	A–2B	R733	A–1B	R771	B–1C	R832	B–3C	R867	A–4C	R903	B–3B	C512	B–1B	C817	B–2C		
IC506	A–1B	Q504	A–2B	Q802	B–4B	R30	A–4A	R515	B–1A	R615	B–2B	R734	B–1B	R772	A–1B	R833	A–3B	R868	A–4C			C513	B–3B	C818	A–2C	CN5	A–4A
IC601	B–2B	Q505	A–2B			R31	B–3A	R516	A–1A	R634	B–2B	R735	B–1B	R773	A–2C	R834	A–2C	R869	A–4C	VR801	B–3C	C601	A–2B	C819	B–2C	CN6	A–3A
IC701	B–1A	Q506	A–2B	D1	B–3A	R32	B–3A	R517	B–1A	R701	A–2B	R736	A–1B	R774	B–2C	R835	A–2C	R870	B–4C			C602	A–2B	C820	A–2C	CN26	A–3C
IC702	A–2B	Q507	A–3B	D701	B–1A	R33	A–3A	R518	B–1A	R702	A–2C	R737	A–1B	R601	A–3B	R836	A–3C	R871	B–4B	C1	A–4B	C603	B–4A	C823	A–4C		
IC703	B–1C	Q508	A–1A	D702	B–1C	R40	B–4A	R519	A–1A	R703	A–1A	R738	B–1B	R802	A–3B	R837	B–3C	R872	B–4B	C2	A–4B	C701	B–1A	C824	A–4C	LC801	A–4C
IC704	A–1C	Q510	A–1A			R401	A–3A	R520	A–1A	R704	B–1A	R739	B–1B	R803	A–3B	R838	A–2C	R873	B–4C	C3	A–4C	C702	A–2A	C825	B–4B	LC802	A–4B
IC705	B–1C	Q601	A–2A	R1	B–3A	R402	B–3A	R521	A–1A	R705	A–1A	R740	B–1B	R804	A–3B	R839	A–2C	R874	B–4B	C4	B–4C	C704	B–1A	C826	B–4B	LC803	A–4A
IC706	A–1B	Q602	A–2A	R2	B–3A	R403	A–3A	R522	A–1A	R706	A–1A	R741	B–1B	R805	A–3B	R840	A–3C	R875	B–4B	C5	A–4A	C705	B–2B	C827	B–4B	LC804	A–4A
IC801	B–3B	Q603	A–2A	R3	B–3A	R404	A–3A	R523	A–1A	R707	A–1A	R742	B–1B	R806	A–3B	R841	B–2B	R876	B–4B	C6	A–4A	C706	A–1B	C828	B–4B		
IC802	B–2C	Q604	A–2B	R4	B–3A	R405	A–3A	R524	A–1A	R708	B–1A	R745	B–1C	R807	A–3B	R842	B–2B	R877	B–4A	C7	B–3A	C707	B–1B	C829	B–4C		
IC803	B–2C	Q605	A–2B	R5	A–3A	R406	B–3A	R525	A–1A	R709	B–1A	R746	B–1C	R808	A–3B	R843	B–2B	R878	B–4A	C8	B–3A	C708	A–1B	C830	A–4A		
IC804	B–4C	Q606	A–2B	R6	B–4A	R407	A–3A	R526	B–1A	R710	B–1A	R747	B–1C	R809	A–3B	R844	B–2B	R879	A–3C	C10	A–4A	C709	A–1B	C831	A–4C		
IC805	B–3C	Q607	A–2B	R7	B–4A	R408	B–3A	R527	B–1A	R711	B–1A	R748	B–1C	R810	A–2B	R845	A–2C	R880	A–4B	C11	B–4A	C710	A–1C				
IC806	B–2C	Q702	A–1A	R8	A–3A	R409	A–3A	R528	A–1A	R712	B–1A	R749	A–1C	R811	A–2C	R846	A–2C	R881	A–3C	C12	A–3A	C711	A–1C	L1	B–2A		
IC807	B–4C	Q703	B–1A	R9	A–3A	R410	B–3A	R529	A–1A	R713	A–2A	R750	A–1C	R812	B–3B	R847	A–2B	R882	A–3C	C13	A–4A	C712	A–1C	L2	B–2A		
IC808	B–4B	Q704	A–1A	R10	B–3A	R411	B–3A	R530	A–1A	R714	A–1A	R751	B–1C	R813	B–3B	R848	A–2C	R884	A–4B	C14	A–3C	C713	A–1C	L501	B–1A		
IC809	B–4B	Q705	A–1A	R11	B–3A	R412	A–3B	R531	A–1B	R715	A–2A	R752	A–1C	R814	A–3B	R849	B–2C	R885	A–4B	C15	A–4C	C714	B–1C	L502	B–1A		
IC810	B–4A	Q706	B–1A	R12	A–3A	R413	A–3B	R532	B–1B	R716	B–1A	R753	A–1C	R815	B–3B	R850	A–2C	R886	A–4B	C16	B–4B	C715	B–2A	L701	A–1B		
		Q707	A–1B	R13	B–3B	R414	A–3B	R533	A–1B	R717	B–2A	R754	A–1C	R816	A–3B	R851	A–2C	R887	A–4C	C32	A–3A	C716	B–1B				
Q1	A–3A	Q708	A–2B	R14	A–3A	R415	B–3B	R534	A–2B	R718	B–2A	R755	B–1C	R817	A–4B	R852	B–2C	R888	B–4C	C33	A–4A	C717	A–1A	DL401	B–3A		
Q2	A–3A	Q709	A–2B	R15	A–3A	R434	A–3B	R535	B–2B	R719	B–2A	R756	B–1C	R818	B–4B	R853	B–2C	R889	B–3B	C401	A–3B	C801	B–4B	DL501	B–2A		
Q3	B–3A	Q710	A–1B	R16	B–4A	R501	A–2A	R601	B–2A	R720	B–2B	R757	B–1C	R819	B–4B	R854	B–2C	R890	B–4B	C402	A–3B	C802	B–3B	DL601	B–2A		
Q4	B–4A	Q711	A–1B	R17	B–3A	R502	B–3A	R602	B–2A	R721	A–1B	R758	B–1C	R820	B–4A	R855	A–2C	R891	A–4B	C403	B–2B	C805	A–2C	DL701	A–2C		
Q5	A–4A	Q712	A–1B	R18	B–3B	R503	A–2A	R603	A–2A	R722	A–1B	R759	A–1C	R821	B–4A	R856	A–2C	R892	B–4A	C501	A–2B	C806	B–3C	DL702	A–2C		
Q6	B–3B	Q713	A–1B	R19	B–3A	R504	A–2A	R604	A–2A	R723	A–1B	R760	A–1B	R822	A–4C	R857	A–2C	R893	B–4A	C502	A–3B	C807	B–3C	DL801	A–4B		
Q401	A–3A	Q714	A–1B	R20	B–3B	R505	A–3A	R605	A–2A	R724	A–1B	R761	A–1C	R823	A–4C	R858	A–2C	R894	B–4A	C503	B–1A	C808	A–2C	DL802	A–4B		

MARK
RANK

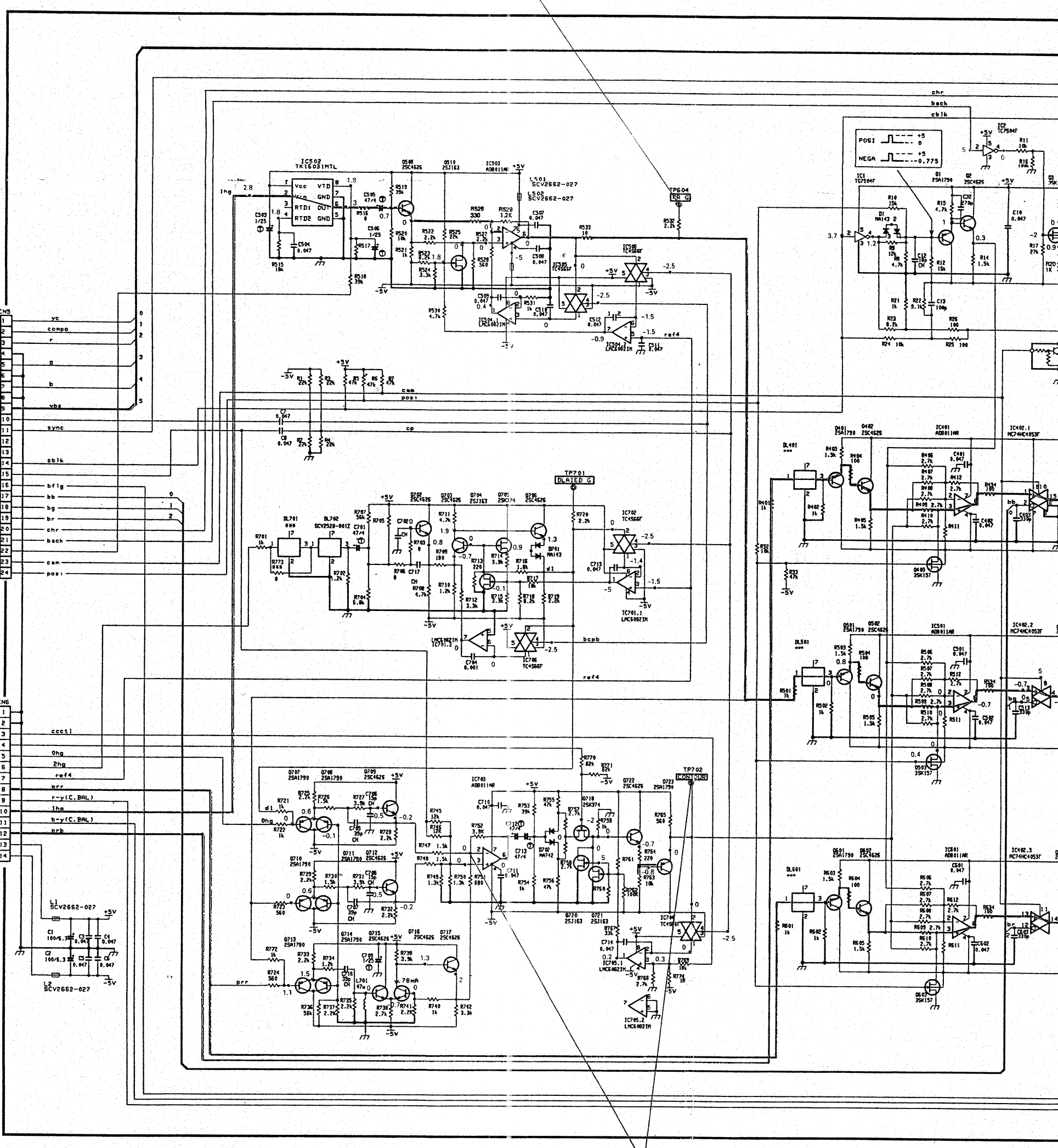


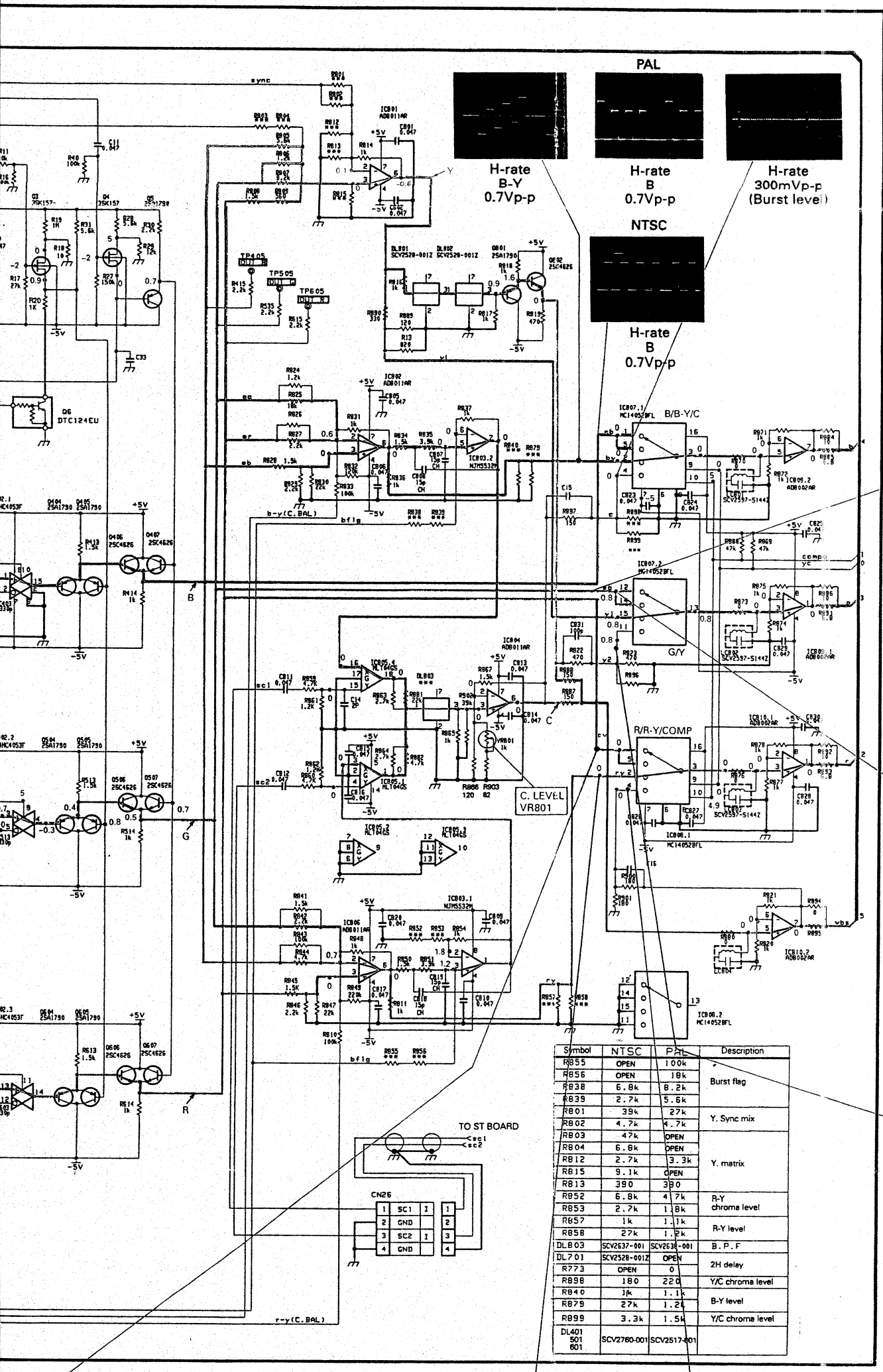
3-14

3.14 CE BOARD SCHEMATIC DIAGRAM 0 6



H-rate
2.0Vp-p



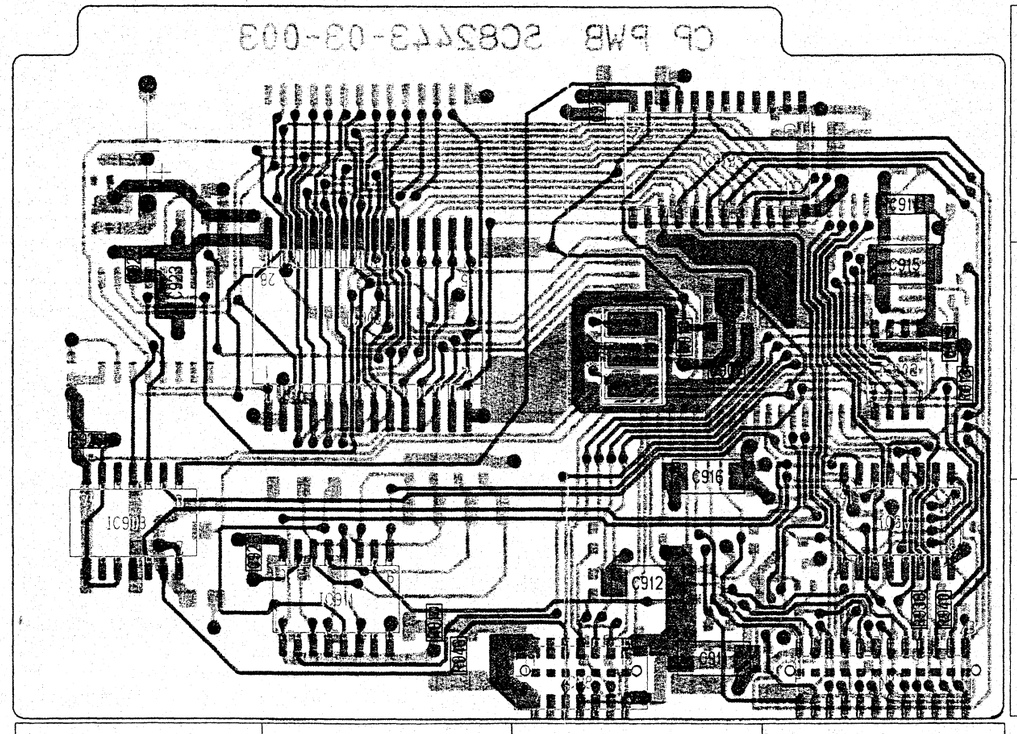


Symbol	NTSC	PAL	Description
R855	OPEN	100k	Burst flag
R856	OPEN	18k	
R838	6.8k	8.2k	
R839	2.7k	5.6k	
R801	39k	27k	Y. Sync mix
R802	4.7k	4.7k	
R803	47k	OPEN	Y. matrix
R804	6.8k	OPEN	
R812	2.7k	3.3k	
R815	9.1k	OPEN	
R813	390	390	
R852	6.8k	4.7k	R-Y chroma level
R853	2.7k	1.8k	
R857	1k	1.1k	R-Y level
R858	27k	1.2k	
DL803	SCV2637-001	SCV2638-001	B.P.F
DL701	SCV2528-001Z	OPEN	2H delay
R773	OPEN	0	
R898	180	220	Y/C chroma level
R840	1k	1.1k	B-Y level
R879	27k	1.2k	
R899	3.3k	1.5k	Y/C chroma level
DL401 501 601	SCV2760-001	SCV2517-001	

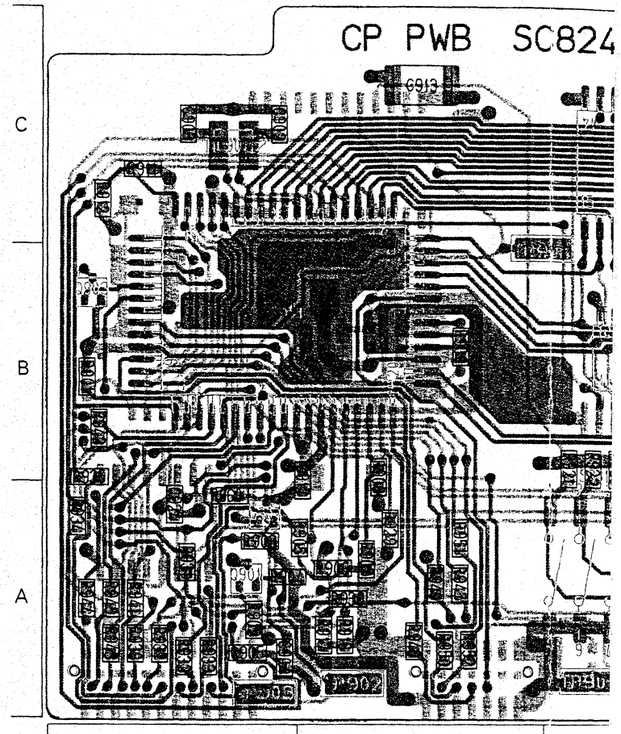
91124

3.15 CP CIRCUIT BOARD

– Side A –



– Side B –

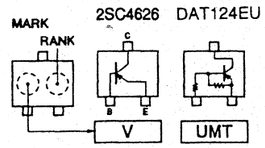


● **ADDRESS TABLE OF BOARD PARTS**

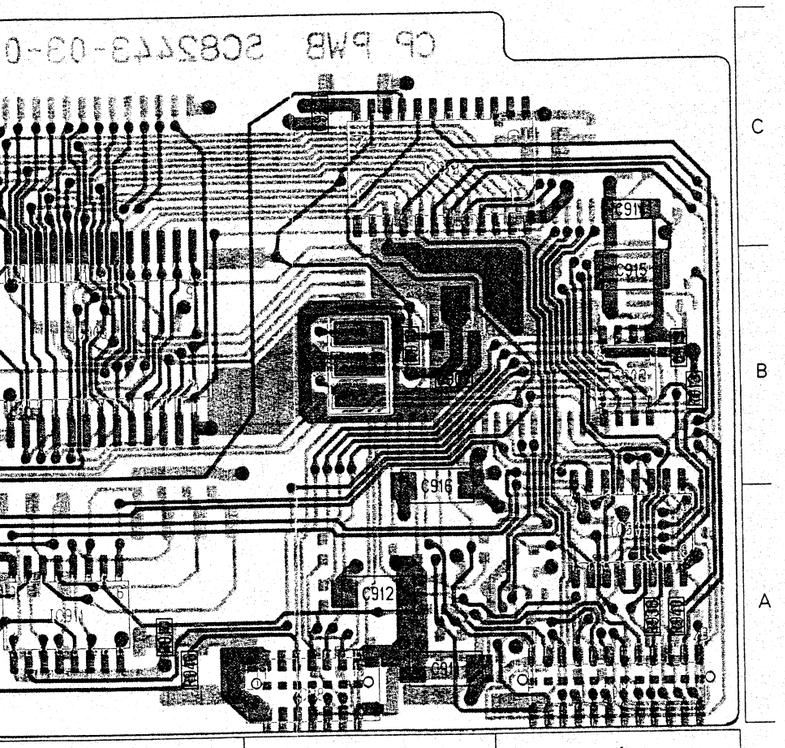
Each address may have an address error by one interval.

A–1C
Side — Y axis
X axis

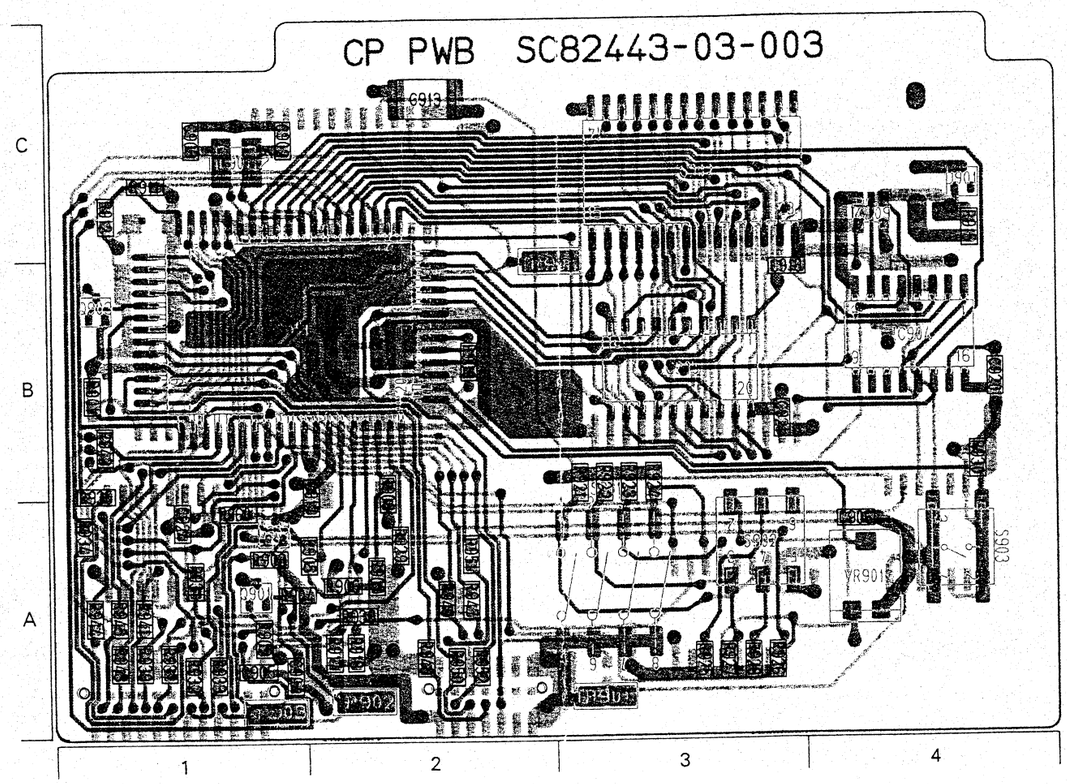
IC901	B–1B	R918	B–2A	VR901	B–4A	S902	B–3A
IC902	B–3C	R921	B–3B			S903	B–4A
IC903	A–1B	R922	B–3B	C901	A–4C		
IC904	B–4B	R923	B–3B	C902	B–1C	CN7	A–1A
IC905	B–3B	R924	B–3B	C903	B–1C	CN8	A–2A
IC906	A–3B	R925	B–3A	C904	B–1A		
IC907	A–1A	R926	B–3A	C905	B–1A	X901	A–2B
IC908	A–4A	R927	B–3A	C906	B–4A		
IC909	B–4C	R928	B–3A	C907	A–2B		
IC910	A–2B	R929	B–2A	C911	A–2A		
IC911	A–3A	R930	B–4B	C912	A–2A		
IC912	A–2C	R931	B–1A	C913	B–2C		
		R932	B–1A	C914	A–1C		
Q901	B–1A	R933	B–1A	C915	A–1B		
Q902	B–1A	R934	B–1A	C916	A–2B		
Q903	B–1B	R935	B–1B	C917	B–2A		
		R936	B–2A	C918	B–3B		
D901	B–4C	R937	B–1A	C919	A–1B		
		R938	A–1A	C920	B–4B		
R901	B–1B	R939	B–1A	C921	B–3B		
R902	B–1A	R940	A–1A	C922	A–4B		
R903	B–1A	R941	B–1A	C923	A–4B		
R904	B–1A	R942	B–1B	C924	B–1A		
R905	B–2A	R943	B–1A	C925	A–4B		
R906	B–2A	R944	B–1A	C926	A–4A		
R907	B–2A	R945	B–1A	C927	A–2C		
R908	B–2B	R946	A–3A				
R909	B–2B	R947	B–2A	L901	B–1C		
R910	A–2B	R948	B–2A				
R911	B–1C	R949	B–2A	TP901	B–3A		
R912	B–1C	R950	B–2A	TP902	B–2A		
R913	A–1B	R951	B–2A	TP903	B–1A		
R914	A–3A	R952	B–2A	TP904	B–3B		
R915	B–4C	R960	B–1A				
R917	B–2A			S901	B–3A		



– Side A –



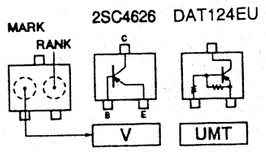
– Side B –



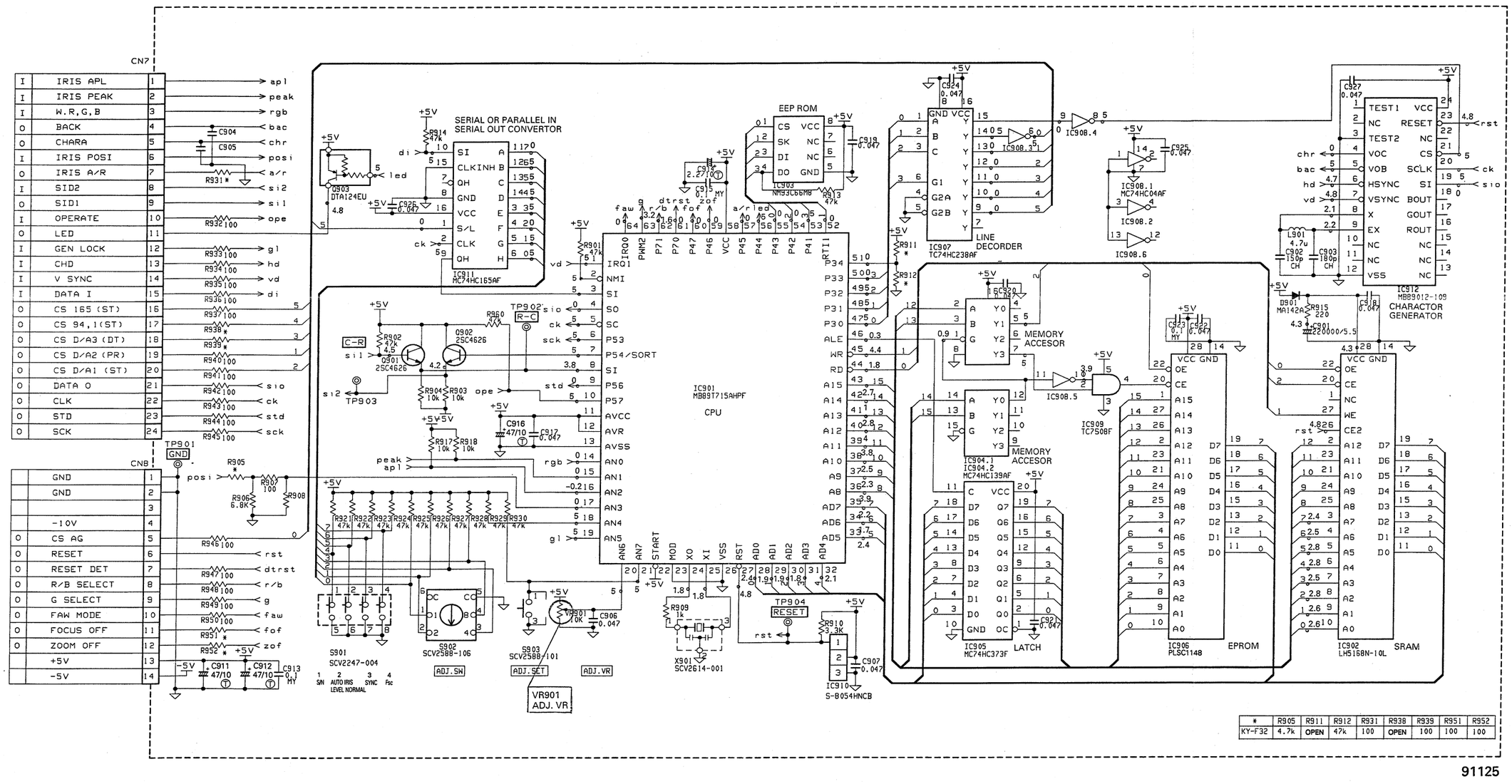
ARD PARTS

address error by one interval.

B-4A	S902	B-3A
	S903	B-4A
A-4C		
B-1C	CN7	A-1A
B-1C	CN8	A-2A
B-1A		
B-1A	X901	A-2B
B-4A		
A-2B		
A-2A		
A-2A		
B-2C		
A-1C		
A-1B		
A-2B		
B-2A		
B-3B		
A-1B		
B-4B		
B-3B		
A-4B		
A-4B		
B-1A		
A-4B		
A-4A		
A-2C		
B-1C		
B-3A		
B-2A		
B-1A		
B-3B		
B-3A		



3.16 CP BOARD SCHEMATIC DIAGRAM



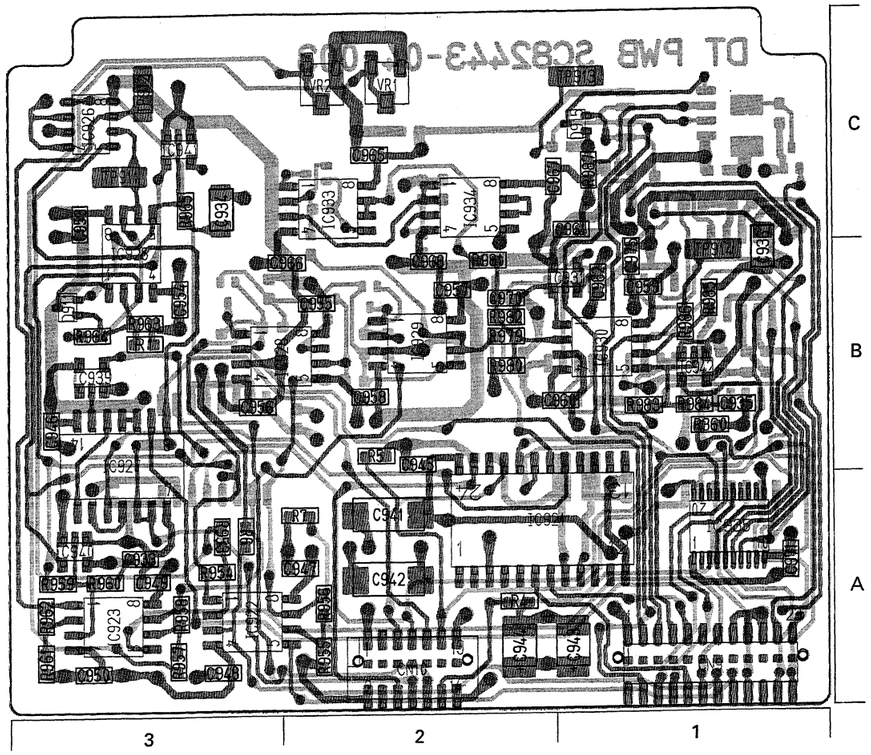
*	R905	R911	R912	R931	R938	R939	R951	R952
KY-F32	4.7k	OPEN	47k	100	OPEN	100	100	100

91125

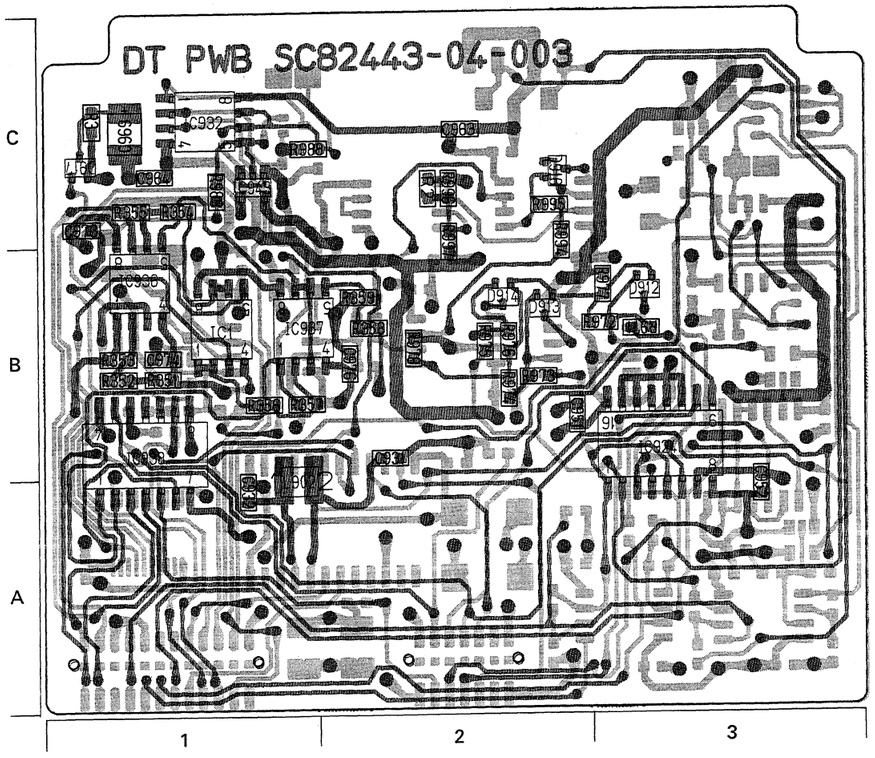
3-17

3.17 DT CIRCUIT BOARD

- Side A -



- Side B -



● ADDRESS TABLE OF BOARD PARTS

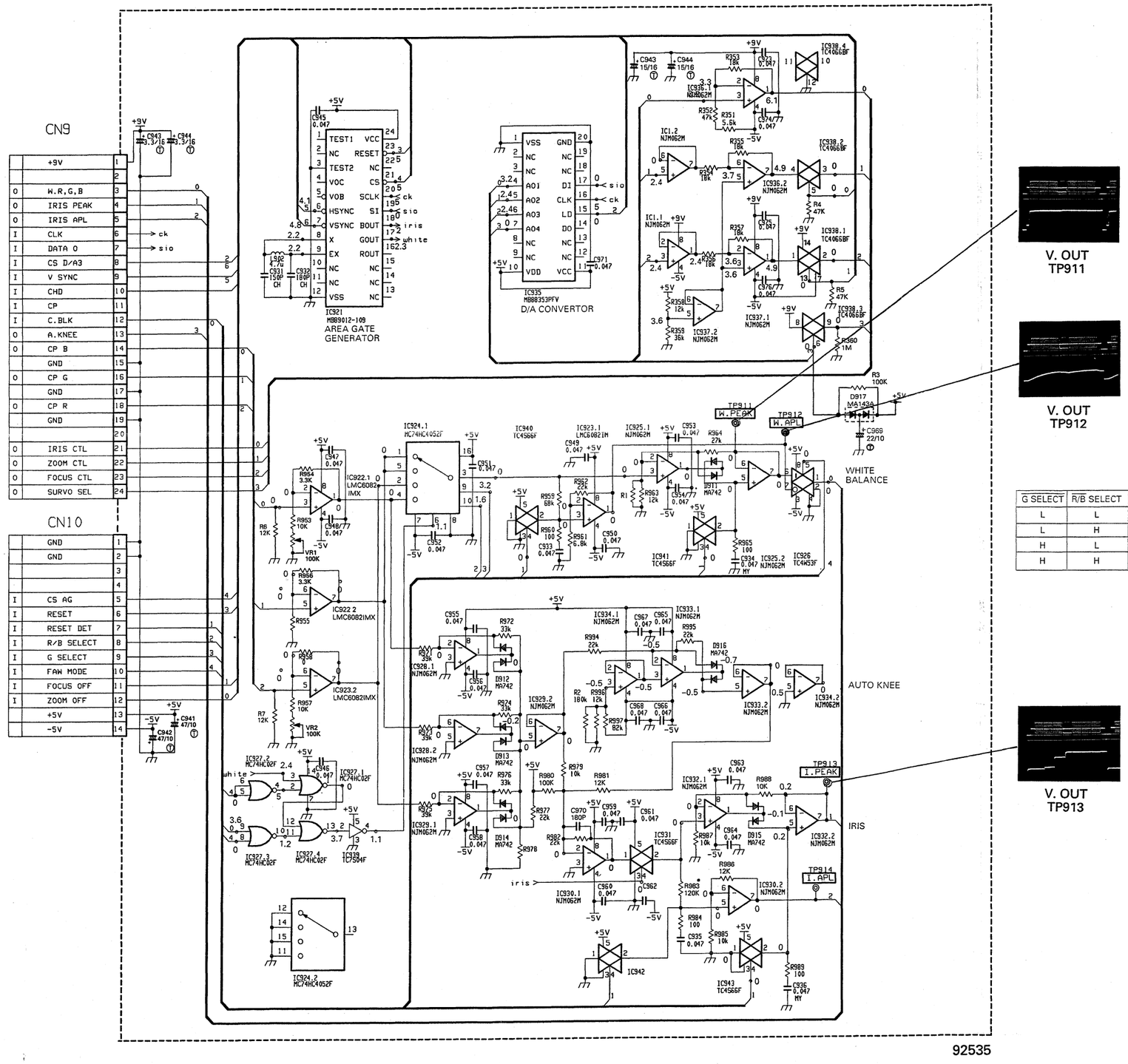
Each address may have an address error by one interval.

A–1C
Side — Y axis
X axis

IC1	B–1B	R1	A–3B	R973	B–2B	C942	A–2A	C975	A–1B
IC921	A–2A	R2	B–2C	R974	B–2B	C943	A–1A	C976	B–2B
IC922	A–3A	R3	B–1C	R975	B–2B	C944	A–2A		
IC923	A–3A	R4	A–2A	R976	B–2B	C945	A–2B	L902	B–1A
IC924	B–3B	R5	A–2B	R977	B–3B	C946	A–3B		
IC925	A–3B	R6	A–3A	R978	B–2B	C947	A–2A	TP911	A–3C
IC926	A–3C	R7	A–2A	R979	A–2B	C948	A–3A	TP912	A–3C
IC927	A–3B	R351	B–1B	R980	A–2B	C949	A–3A	TP913	A–1C
IC928	A–3B	R352	B–1B	R981	A–2B	C950	A–3A	TP914	A–1B
IC929	A–2B	R353	B–1B	R982	A–2B	C951	B–2B		
IC930	A–1B	R354	B–1C	R983	A–1B	C952	B–3A	CN9	A–1A
IC931	A–1B	R355	B–1C	R984	A–1B	C953	A–3C	CN10	A–2A
IC932	B–1C	R356	B–1B	R985	A–1B	C954	A–3B		
IC933	A–2C	R357	B–1B	R986	A–1B	C955	A–2B		
IC934	A–2C	R358	B–2B	R987	A–1C	C956	A–3B		
IC935	A–1A	R359	B–2B	R988	B–2C	C957	A–2B		
IC936	B–1B	R360	A–1B	R989	B–1C	C958	A–2B		
IC937	B–1B	R953	A–3A	R994	B–2B	C959	A–1B		
IC938	B–1B	R954	A–3A	R995	B–2C	C960	A–2B		
IC939	A–3B	R955	A–2A	R996	B–2C	C961	A–1C		
IC940	A–3A	R956	A–2A	R997	B–2B	C962	A–1B		
IC941	A–3C	R957	A–3A			C963	B–2C		
IC942	A–1B	R958	A–3A	VR1	A–2C	C964	B–1C		
IC943	B–1C	R959	A–3A	VR2	A–2C	C965	A–2C		
		R960	A–3A			C966	A–3B		
D911	A–3B	R961	A–3A	C931	B–2B	C967	A–2C		
D912	B–3B	R962	A–3A	C932	B–1A	C968	A–2B		
D913	B–2B	R963	A–3B	C933	A–3A	C969	B–1C		
D914	B–2B	R964	A–3B	C934	A–3C	C970	A–2B		
D915	A–1C	R965	A–3C	C935	A–1B	C971	A–1A		
D916	B–2C	R971	B–3B	C936	A–1B	C973	B–1C		
D917	B–1C	R972	B–3B	C941	A–2A	C974	B–1B		

3-18

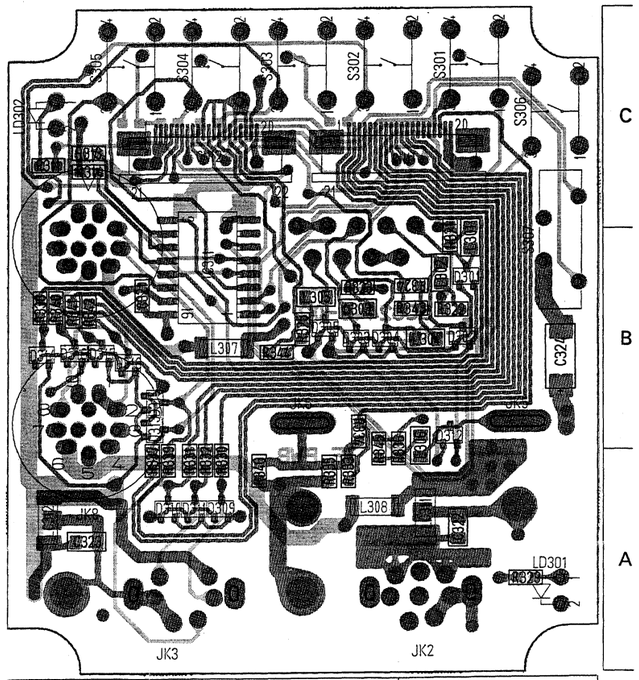
3.18 DT BOARD SCHEMATIC DIAGRAM



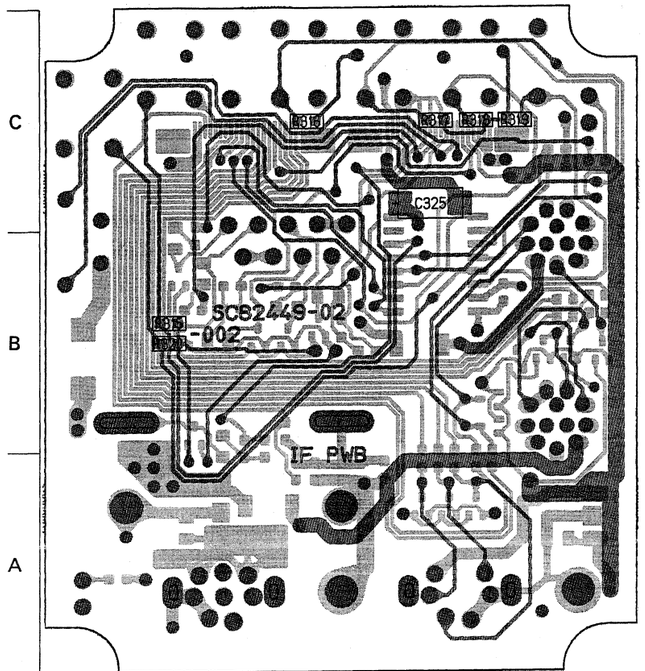
G SELECT	R/B SELECT	OUT
L	L	G
L	H	G
H	L	R
H	H	B

3.19 IF CIRCUIT BOARD

- Side A -

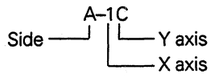


- Side B -

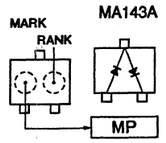


● **ADDRESS TABLE OF BOARD PARTS**

Each address may have an address error by one interval.

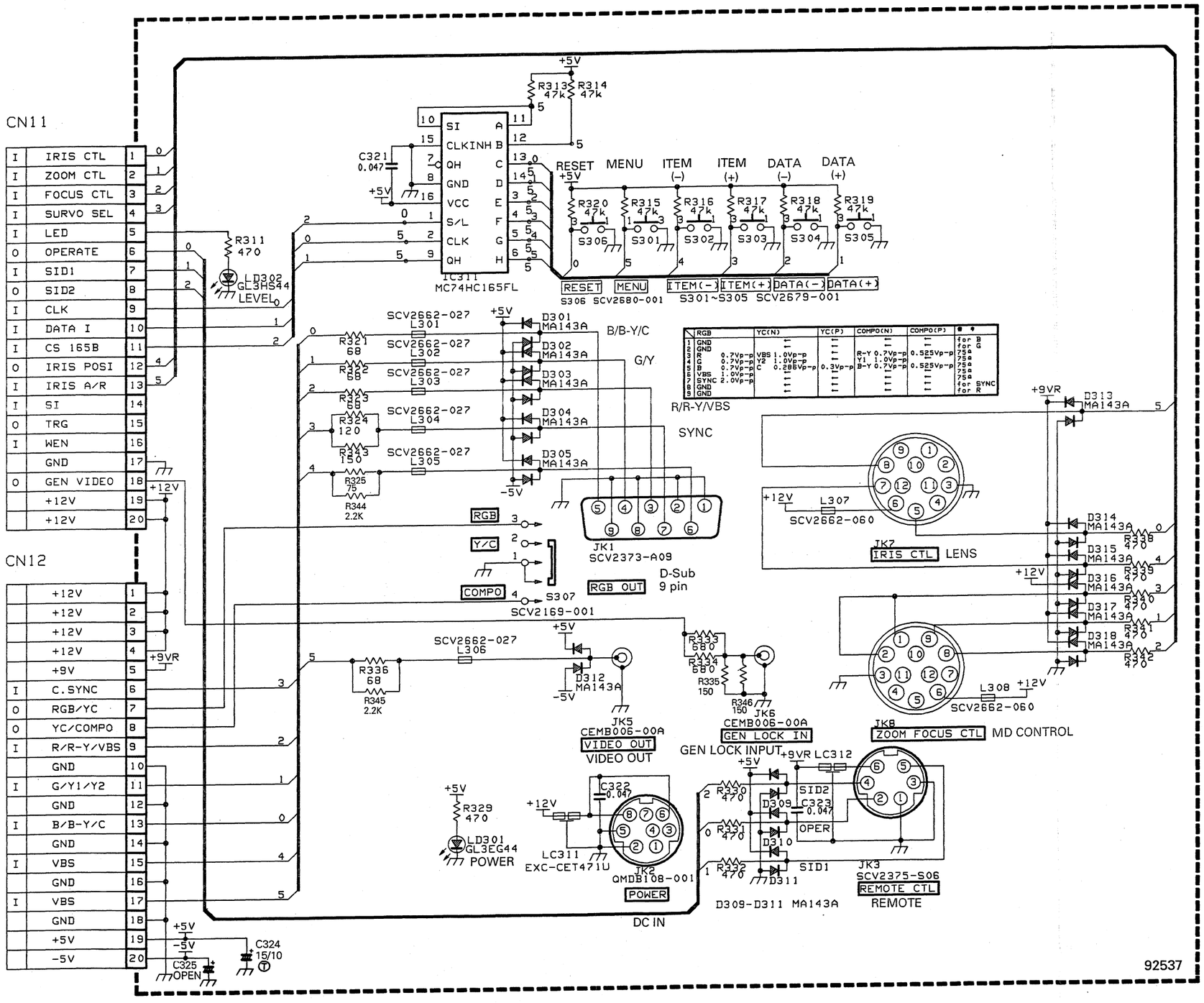


IC311	A-3B	R324	A-1B	L304	A-1B
		R325	A-2B	L305	A-2B
D301	A-1B	R329	A-1A	L306	A-1B
D302	A-1B	R330	A-2A	L307	A-2B
D303	A-2B	R331	A-3A	L308	A-2A
D304	A-2B	R332	A-3A		
D305	A-2B	R333	A-2A	LC311	A-1A
D309	A-2A	R334	A-2B	LC312	A-3A
D310	A-3A	R335	A-2A		
D311	A-3A	R336	A-2B	LD301	A-1A
D312	A-1B	R337	A-3A	LD302	A-3C
D313	A-3B	R338	A-3B		
D314	A-3B	R339	A-3A	S301	A-1C
D315	A-3B	R340	A-3B	S302	A-2C
D316	A-3B	R341	A-3B	S303	A-2C
D317	A-3B	R342	A-3B	S304	A-2C
D318	A-3B	R343	A-1B	S305	A-3C
		R344	A-2B	S306	A-1C
R311	A-3C	R345	A-2B	S307	A-1B
R313	A-3C	R346	A-2A		
R314	A-3C			CN11	A-2C
R315	B-1B	C321	A-3B	CN12	A-3C
R316	B-2C	C322	A-1A		
R317	B-3C	C323	A-3A	JK1	A-2B
R318	B-3C	C324	A-1B	JK2	A-1A
R319	B-3C	C325	B-2C	JK3	A-3A
R320	B-1B			JK5	A-1B
R321	A-1B	L301	A-1B	JK6	A-2B
R322	A-1B	L302	A-1B	JK7	A-3B
R323	A-2B	L303	A-2B	JK8	A-3B



3-20

3.20 IF BOARD SCHEMATIC DIAGRAM



3-21

3.21 MT CIRCUIT BOARD

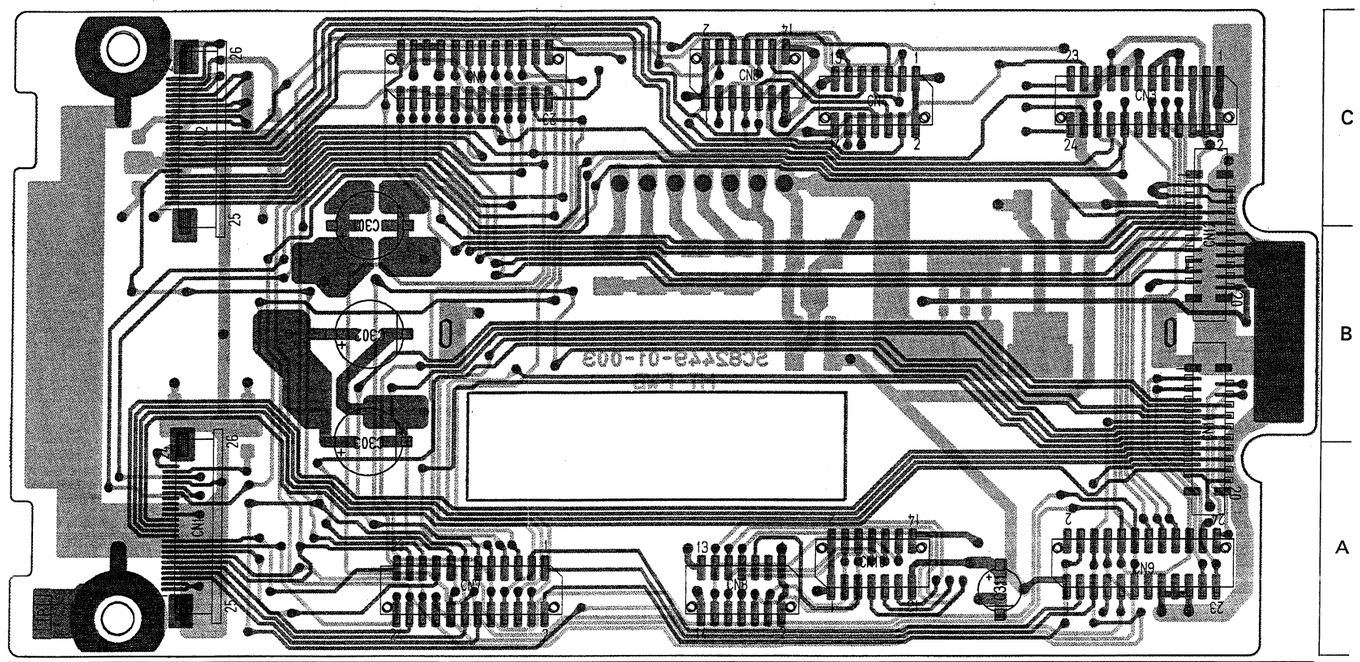
● **ADDRESS TABLE OF BOARD PARTS**

Each address may have an address error by one interval.

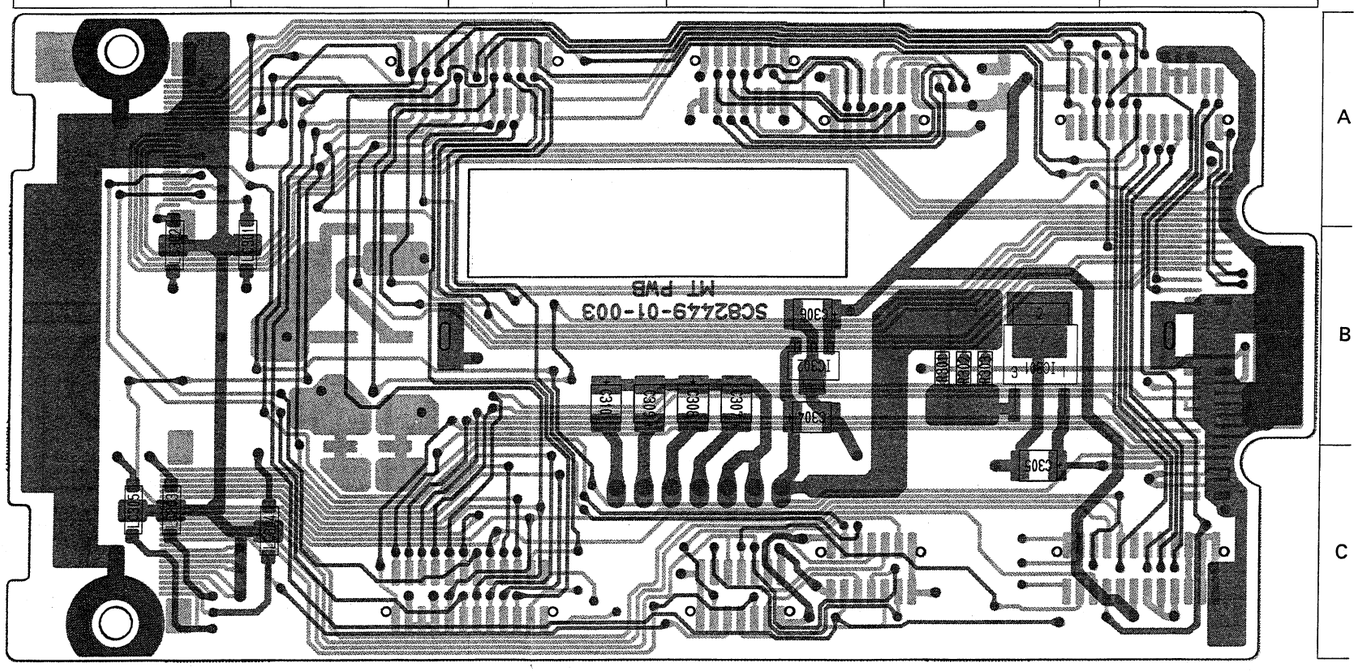
A–1C
Side — | | — Y axis
X axis

IC301	B–2B	RE301	A–4B
IC302	B–3B		
		CN1	A–6A
R301	B–2B	CN2	A–6C
R302	B–2B	CN3	A–1C
R303	B–2B	CN4	A–3C
		CN5	A–4C
C301	A–5C	CN6	A–3C
C302	A–5B	CN7	A–4A
C303	A–5B	CN8	A–3A
C304	B–3B	CN9	A–1A
C305	B–2C	CN10	A–3A
C306	B–3B	CN11	A–1B
C307	B–3B	CN12	A–1B
C308	B–3B		
C309	B–4B	LC301	B–5B
C310	B–4B	LC302	B–6B
C311	A–2A	LC303	B–6C
		LC304	B–5C
TP1	A–6A	LC305	B–6C

- Side A -

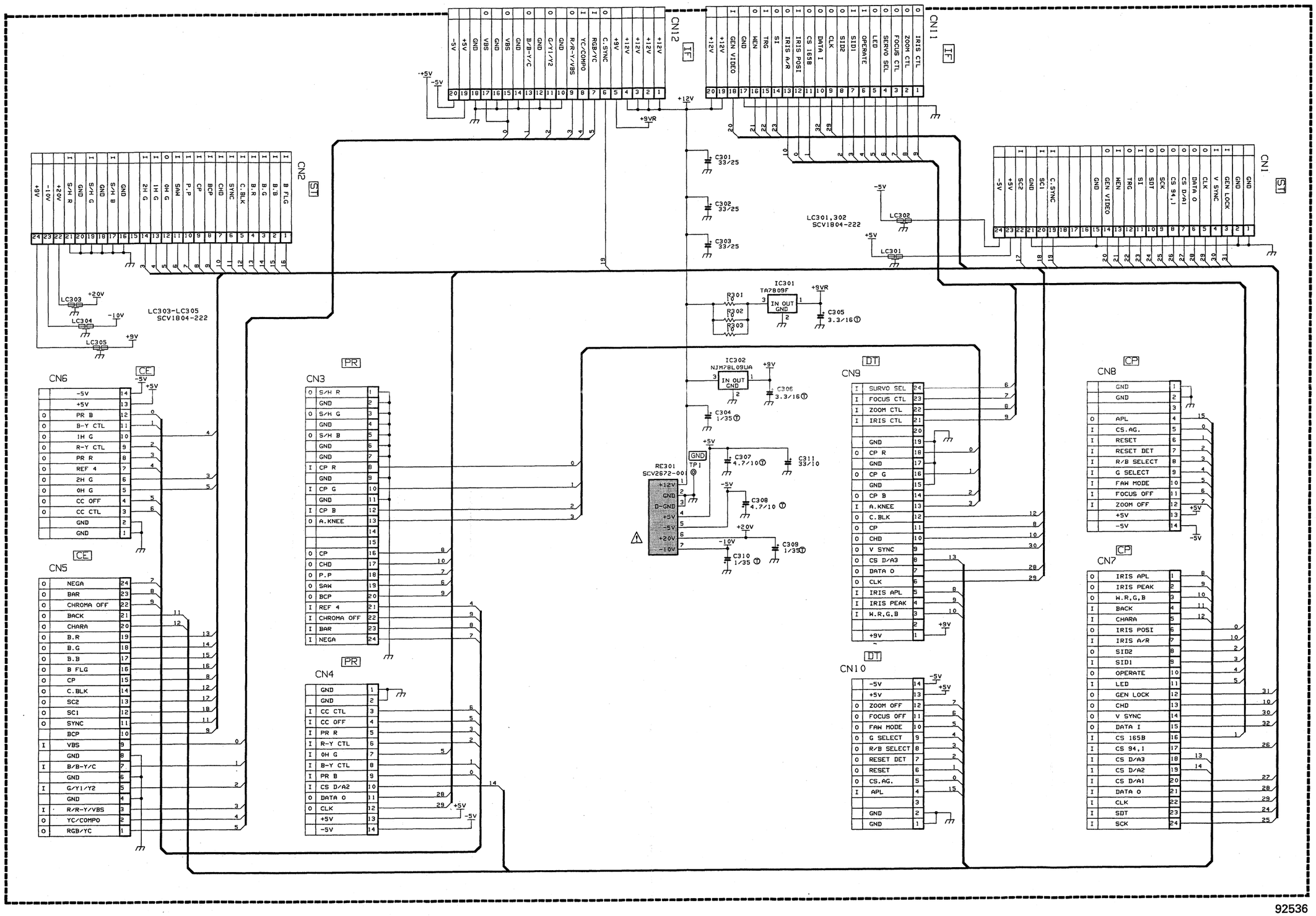


- Side B -



3-22

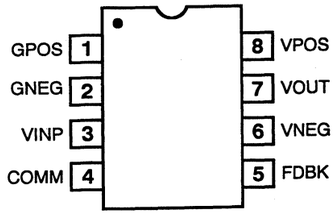
3.22 MT BOARD SCHEMATIC DIAGRAM



3-23

3.23 IC BLOCK DIAGRAM

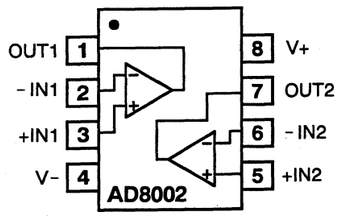
■ AD603AR 【ANALOG DEVICES】
(Variable Gain CTL Amplifire)



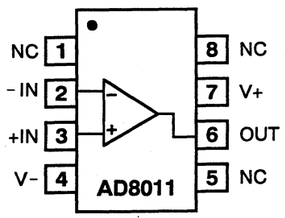
■ Pin funoction

Pin No.	Pin Name
1	GPOS Gain CTL Input " HI "
2	GNEG Gain CTL Input " LOW "
3	VINP Amp. Input
4	COMM GND
5	FDBK Feedback
6	VNEG Vss
7	VOUT Output
8	VPOS V_{cc}

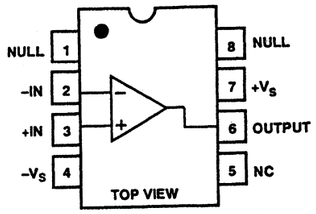
■ AD8002AR 【ANALOG DEVICES】
(Dual Current Feedback Amplifire)



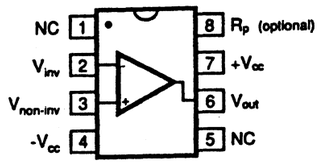
■ AD8011AR 【ANALOG DEVICES】
(Current Feedback Amplifire)



■ AD817AR 【ANALOG DEVICES】
(Hi-Speed Low Power Op.Amp)

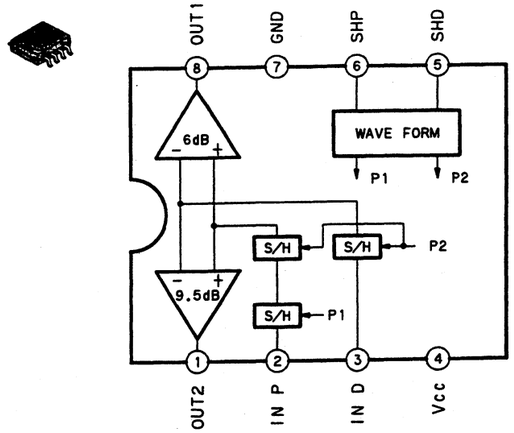


■ CLC425AJE-T2 【COMLINEAR】
(Low Noise Wide Band Current Feedback Operational Amplifier)

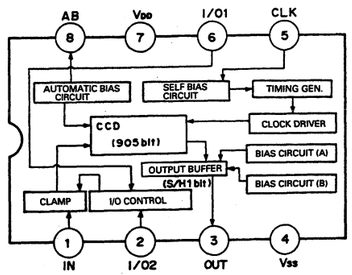


(TOP VIEW)

■ CXA1439M 【SONY】
(Correlated Double Sampling)

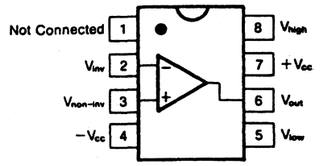


■ CXL5504M 【SONY】
(CMOS-CCD 1H Delayline For NTSC)



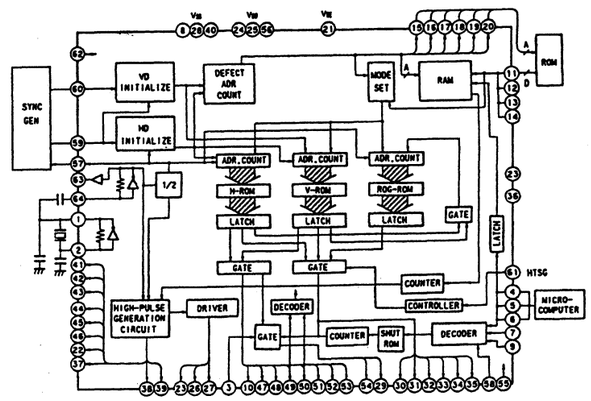
■ CLC501AJE 【COMLINEAR】
(Current Feedback Operational Amplifier with High Speed Output Clamp)

PINOUT



(TOP VIEW)

■ CXD1265R 【SONY】
(CCD Camera Timing Generator)



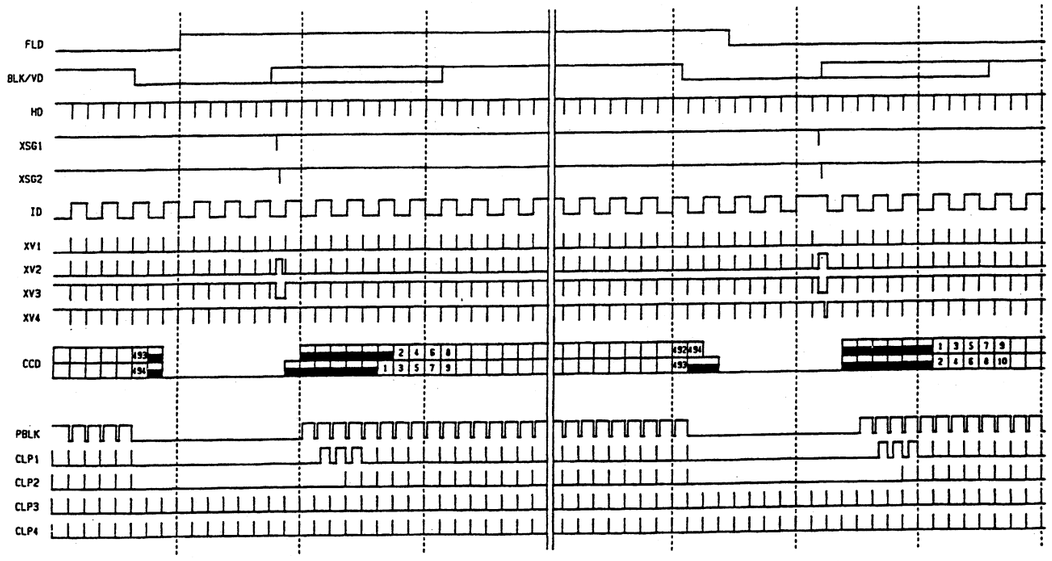
Pin Description

Pin No.	Symbol	I/O	Description
1	OSCO	O	Inverter output for oscillation.
2	OSCI	I	Inverter input for oscillation.
3	EF	I	Input mode select for defect compensation data. (With pull-up resistance) High: External ROM used, Low: Serial input from microcomputer
4	ED0	I	Shutter speed setting. Strobe input for serial mode. (With pull-up resistance)
5	ED1	I	Shutter speed setting. Clock input for serial mode. (With pull-up resistance)
6	ED2	I	Shutter speed setting. Data input for serial mode. (With pull-up resistance)
7	SMD1	I	Shutter mode setting. (With pull-up resistance)
8	Vss	–	GND
9	SMD2	I	Shutter mode setting. (With pull-up resistance)
10	XVCT	O	External ROM power supply control.
11	D1	I	When using external ROM, data input. (With pull-down resistance) When not using, Low: No defect compensation; High: Defect compensation enabled.
12	D2	I	When using external ROM, data input. (With pull-down resistance) When not using, Low: Color; High: Black-and-white.
13	D3	I	When using external ROM, data input. (With pull-down resistance) When not using, fixed at Low.
14	D4	I	When using external ROM, data input. (With pull-down resistance) When not using, Low: NTSC; High: PAL.
15	A5	O	External ROM address output.
16	A4	O	External ROM address output.
17	A3	O	External ROM address output.
18	A0	O	External ROM address output.
19	A1	O	External ROM address output.
20	A2	O	External ROM address output.
21	VEE	–	GND
22	RG	O	Reset gate pulse output.
23	LH1	–	CCD horizontal register final-step clock output.
24	VDD	–	Power supply.
25	VDD	–	Power supply for H1 and H2.
26	H1	O	Clock output for CCD horizontal register.
27	H2	O	Clock output for CCD horizontal register.
28	Vss	–	GND for H1 and H2.
29	XSUB	O	CCD discharge pulse output.
30	XV2	O	Clock output for CCD vertical register.
31	XV1	O	Clock output for CCD vertical register.
32	XSG1	O	CCD sensor charge readout pulse output.
33	XV3	O	Clock output for CCD vertical register.
34	XSG2	O	CCD sensor charge readout pulse output.
35	XV4	O	Clock output for CCD vertical register.
36	TEST2	I	Test input. Set Low in normal operation.
37	CLD	O	4 fsc clock output.
38	XSHP	O	Pulse for sample-and-hold of pre-charge level.
39	XSHD	O	Data sample-and-hold pulse.
40	Vss	–	GND

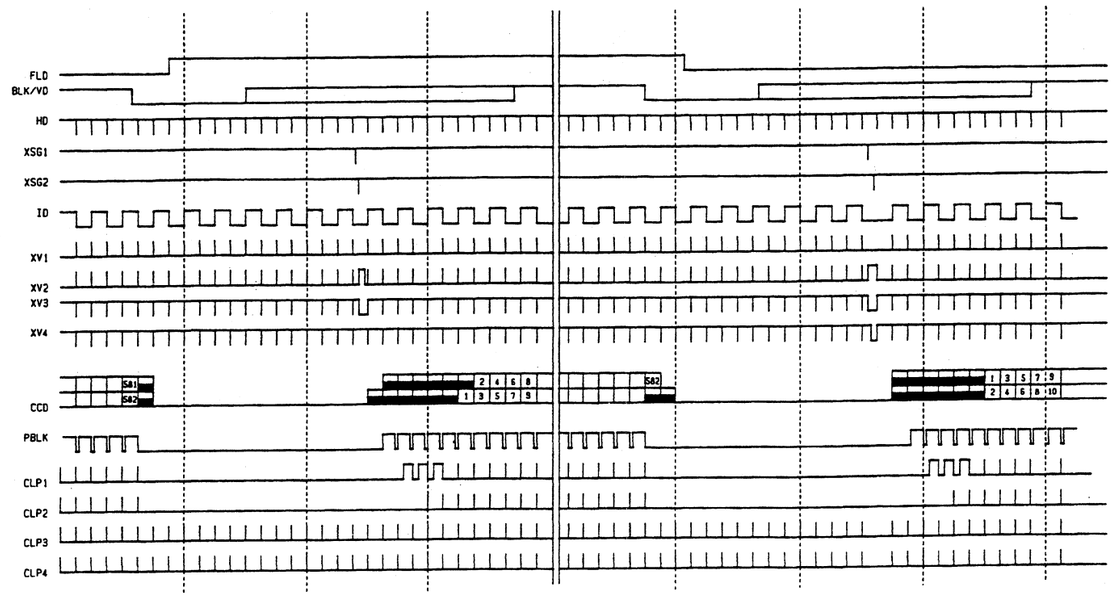
Pin Description

Pin No.	Symbol	I/O	Description
41	XSP1	O	Color separation sample-and-hold pulse. Halted for black-and-white mode.
42	XSP2	O	Color separation sample-and-hold pulse. Halted for black-and-white mode.
43	XSH1/ SHP	O	Switching sample-and-hold pulse/pre-charge level sample-and-hold pulse (black-and-white mode)
44	XSH2/ SHD	O	Switching sample-and-hold pulse/data sample-and-hold pulse (black-and-white mode)
45	XDL1	O	Delay line clock output. Halted for black-and-white mode.
46	XDL2	O	Delay line clock output. Halted for black-and-white mode.
47	BFG	O	Pulse output for chroma modulator in encoder. When GM is set at High, defect indicator pulse output. Halted for black-and-white mode.
48	CLP1	O	Clamp pulse output.
49	CLP2	IO	Clamp pulse output. When GM is set at High, standby mode switching input.
50	CLP3	IO	Clamp pulse output. When GM is set at High, standby mode switching input.
51	CLP4	O	Clamp pulse output.
52	PBLK	O	Blanking cleaning pulse output.
53	ID	O	Line identification output. Halted for black-and-white mode.
54	WEN	O	Write enable output for low-speed shutter operation.
55	GM	I	Low: Analog signal processing; High: Digital signal processing. (With pull-down resistance)
56	V_{DD}	–	Power supply.
57	CL	O	4 fsc clock output.
58	PS	I	Switching for electronic shutter speed input method. (With pull-up resistance)Low: Serial input; High: Parallel input
59	HD	I	Horizontal synchronizing signal input.
60	VD	I	Vertical synchronizing signal input. (Low period is 9H for NTSC/EIA and 7.5H for PAL/CCIR.)
61	HTSG	I	Control input for XSG1and XSG2. (With pull-up resistance) Low: XSG1, XSG2 halted; High: XSG1, XSG2 generated.
62	TEST	I	Test input. Set at Low during normal operation. (With pull-down resistance)
63	XCK	O	8 fsc clock output.
64	CK	I	8 fsc clock input

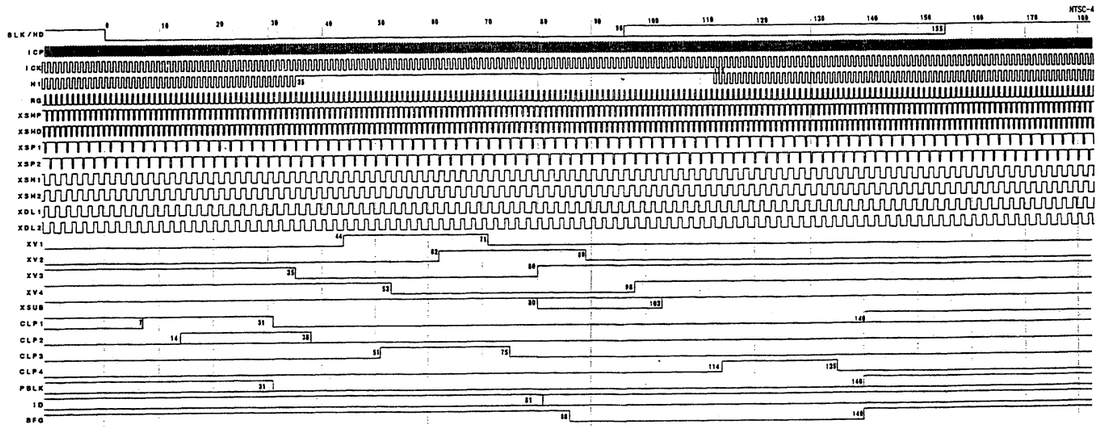
Time Chart (1) **< NTSC vertical direction >** (However, ID halted for black-and-white mode)



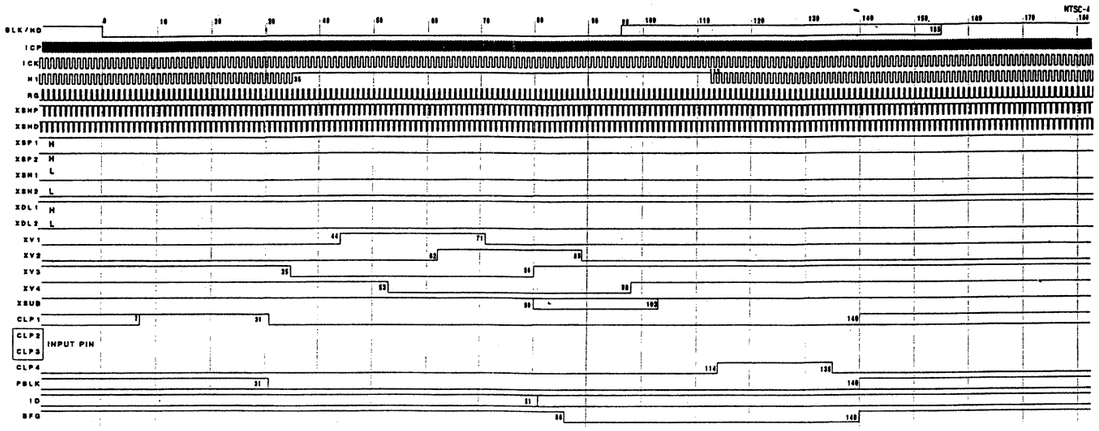
Time Chart (2) **< PAL vertical direction >** (However, ID halted for black-and-white mode)



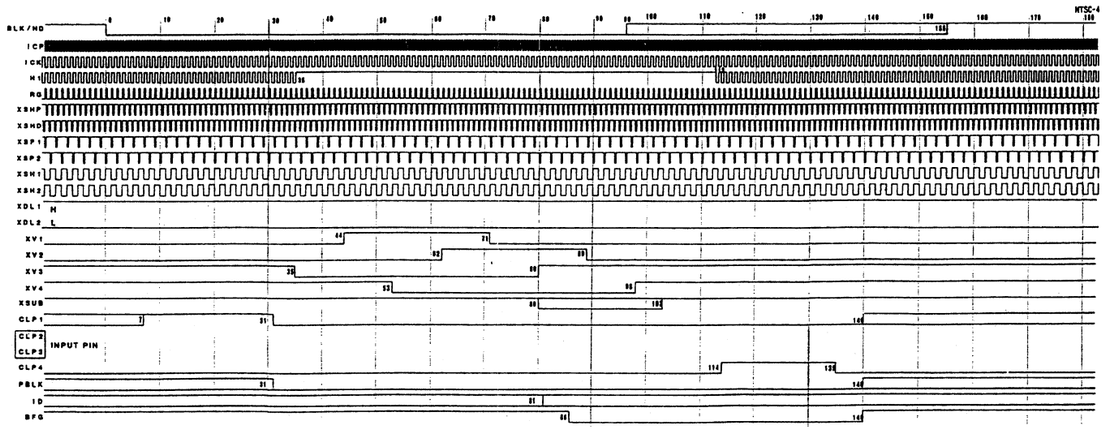
Time Chart (3) **< NTSC horizontal direction >** Analog color (GM=L, D2=L, TEST2=L)



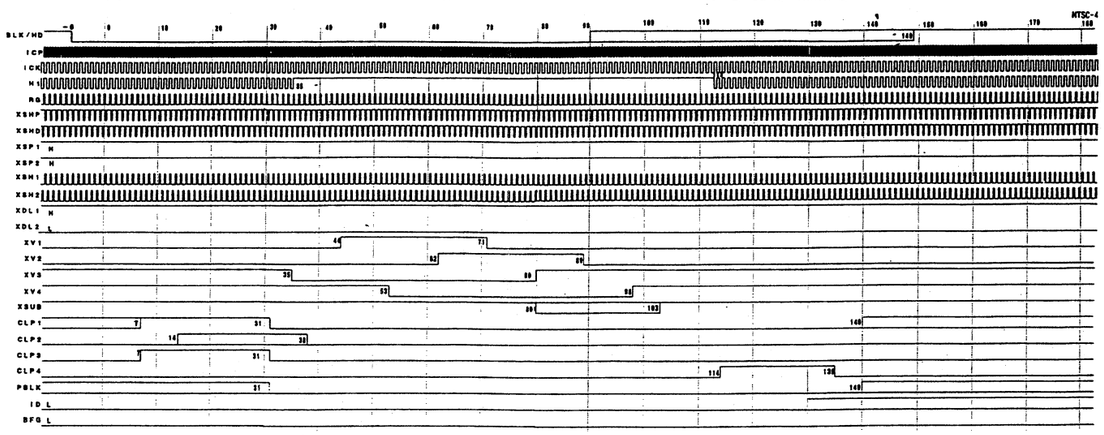
Time Chart (4) **< NTSC horizontal direction >** Digital color 1 (GM=H, D2=L, TEST2=L)



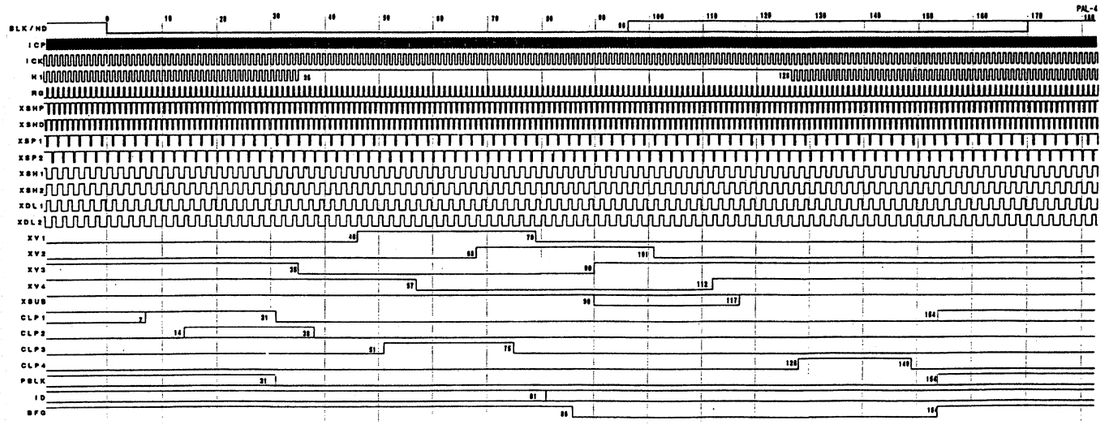
Time Chart (5) **< NTSC horizontal direction >** Digital color 2 (GM=H, D2=L, TEST2=H)



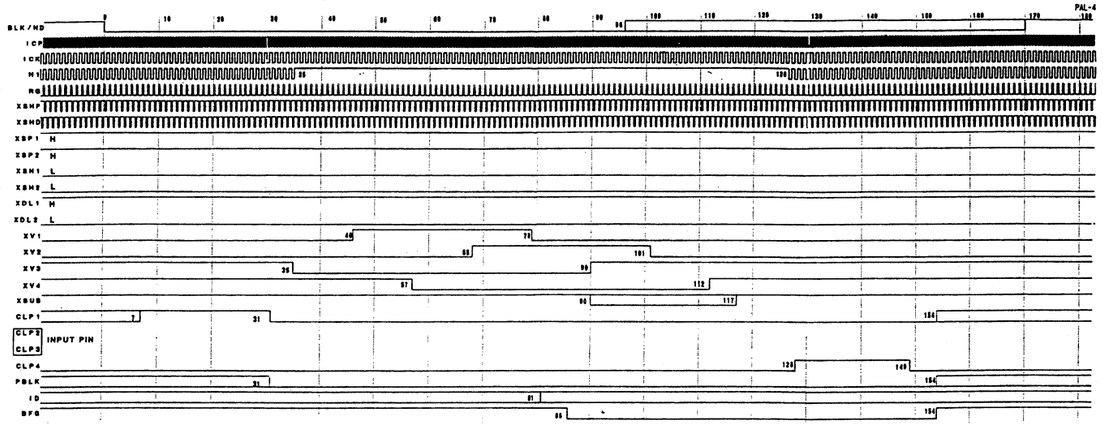
Time Chart (6) **< NTSC horizontal direction >** Analog black-and-white (GM=L, D2=H, TEST2=L)



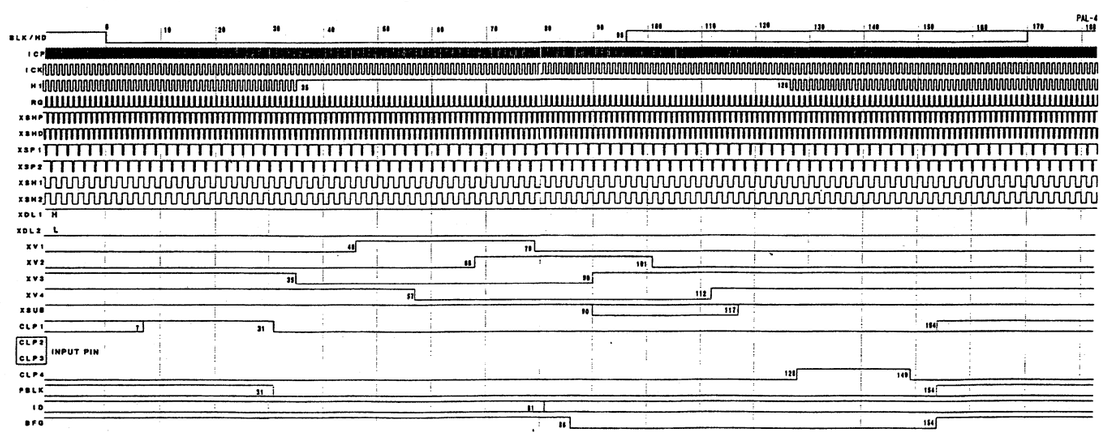
Time Chart (7) **< PAL horizontal direction >** Analog color (GM=L, D2=L, TEST2=L)



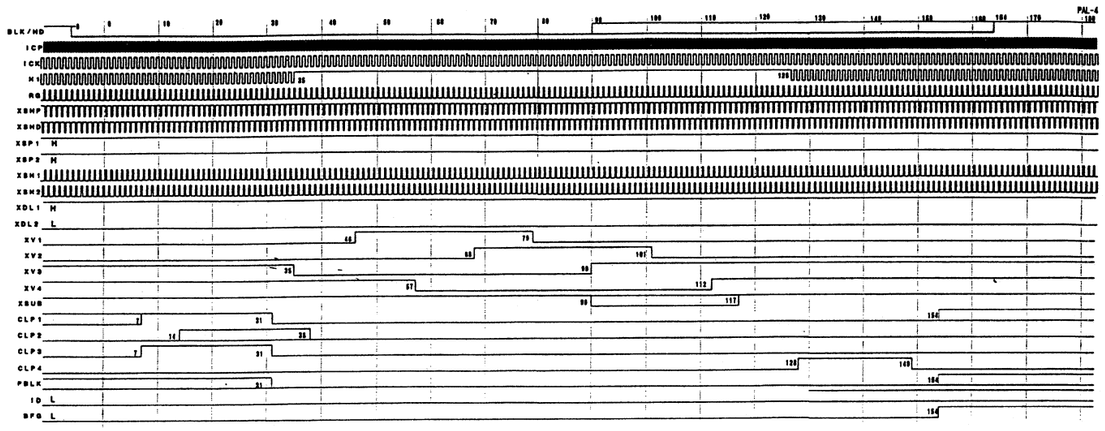
Time Chart (8) **< PAL horizontal direction >** Digital color 1 (GM=H, D2=L, TEST2=L)



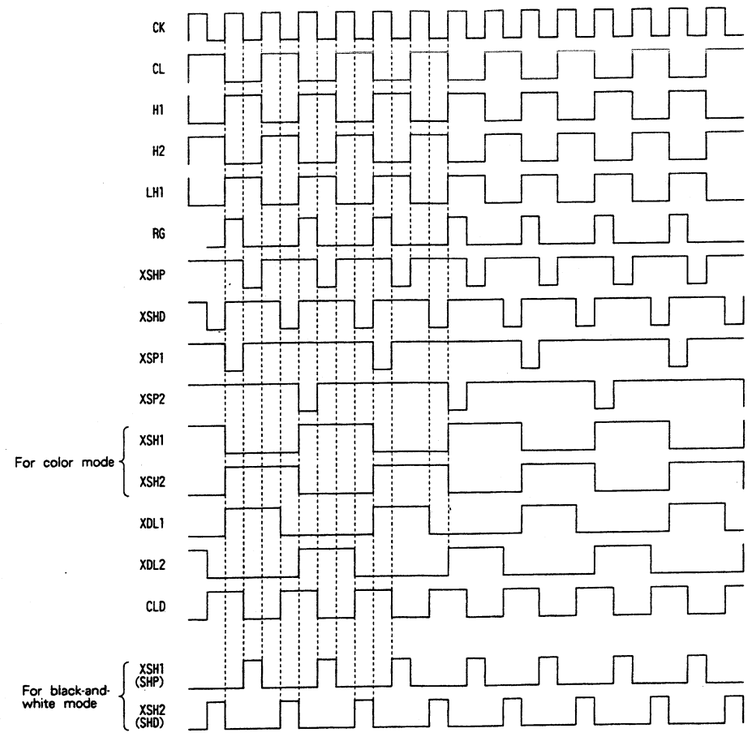
Time Chart (9) **< PAL horizontal direction >** Digital color 2 (GM=H, D2=L, TEST2=H)



Time Chart (10) **< PAL horizontal direction >** Analog black-and-white (GM=L, D2=H, TEST2=L)

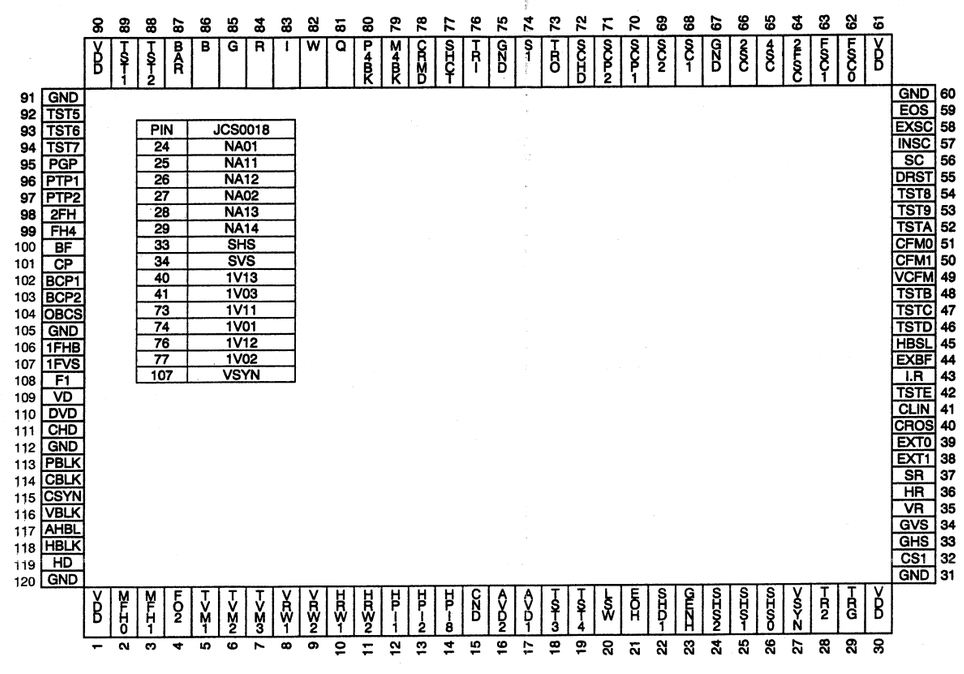


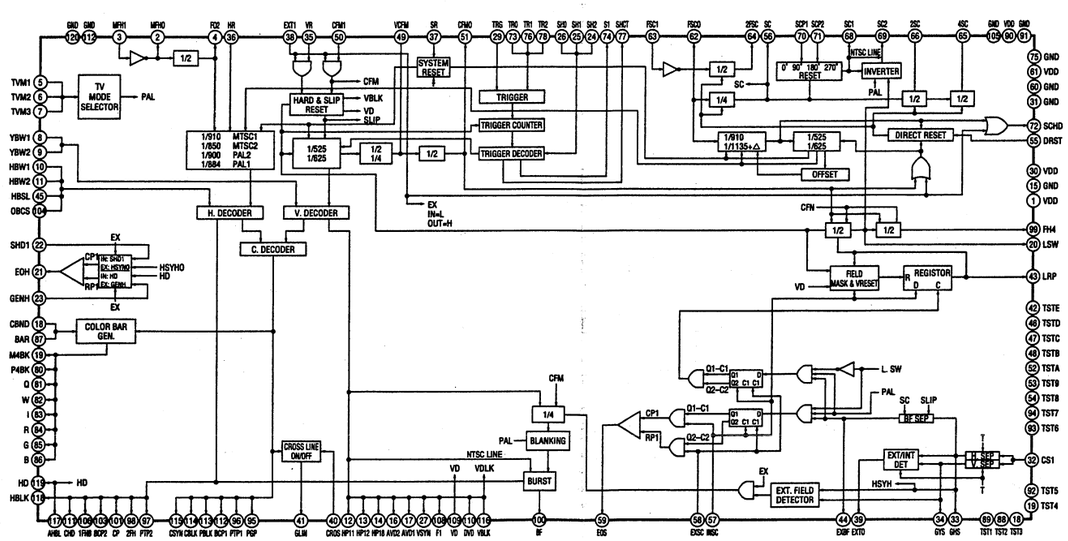
Time Chart (11) **< High speed phase >**



For black-and-white mode, XSP1, XSP2, XDL1, and XDL2 halted.

■ JCS0027 【JVC】 (SSG)





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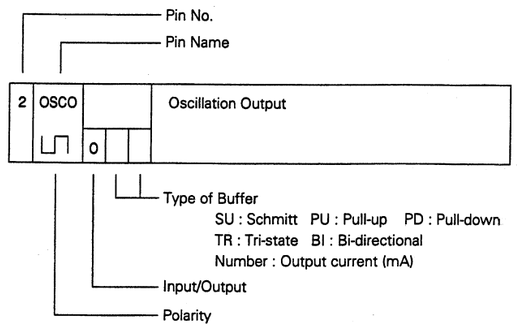
Terminal Specifications of JCS0023 (4th Revision)



Pin No.	Pin Name	Function
1	VDD	+5 Power supply
2	MFHO	Synchronizing oscillation output O Output terminal for built-in oscillator
3	MFHI	Synchronizing oscillation input I Input terminal for built-in oscillator
4	F02	1/2 divided output O 9 1/2 divided output of synchronizing oscillator
5	TVM1	TV mode 1 I PU
6	TVM2	TV mode 2 I PU
7	TVM3	TV mode 3 I PU

	NTSC1 1820FH	NTSC2 1716FH	PAL2 1816FH	PAL1 1728FH	PALM 1716FH	SECAM 1716FH
TVM1	L	H	L	H	L	H
TVM2	L	L	H	H	L	L
TVM3	L	L	L	L	H	H

Pin No.	Pin Name	Function
8	VBW1	V. blanking control 1 I PU
9	VBW2	V. blanking control 2 I PU

VBW1	L	H	L	H
VBW2	L	L	H	H
NTSC1	21H	20H	19H	18H
NTSC 2	21H	20H	19H	18H
PAL1	26H	25H	24H	23H
PAL2	26H	25H	24H	23H
PALM	21H	20H	19H	18H
SECAM	26H	25H	24H	23H

Pin No.	Pin Name	Function
10	HBW1	H. blanking control 1 I PU
11	HBW2	H. blanking control 2 I PU

HBW1	L	H	L	H
HBW2	L	L	H	H
NTSC1	157T	156T	154T	152T
NTSC2	143T	147T	146T	152T
PAL1	162T	159T	156T	153T
PAL2	170T	167T	164T	161T
PALM	148T	147T	146T	144T
SECAM	162T	159T	156T	153T

Pin No.	Pin Name	Function
12	HP11	H. pulse 11 O 9 H. pulse to be active at 11H, 13H, 15H and 17H.
13	HP12	H. pulse 12 O 9 H. pulse to be active at 12H and 14H.
14	HP18	H. pulse 18 O 9 H. pulse to be active at 18H.
15	GND	Ground
16	AVD2	Pre-vertical drive pulse 2 O 9 Vertical drive pulse whose phase is 8H ahead of VD pulse. Functions as subcarrier blanking for SECAM system.
17	AVD1	Pre-vertical drive pulse 1 O 9 Vertical drive pulse whose phase is 1H ahead of VD pulse.
18	TST3	Test terminal 3 I PU Set this terminal open in general.
19	TST4	Test terminal 4 I PU Set this terminal open in general.
20	LSW	Line switch O 9 Half-divided FH output. Switches color difference signal of neighboring lines by 180° in phase for PAL system.
21	EOH	H. synchronizing digital phase comparison output O TR 13 As compared with leading edge of SHDI; when internal HD has advanced phase: Low level, when internal HD has lagged phase: High level, when internal HD is in-phase: High impedance.
22	SHDI	H. synchronizing digital phase comparison input (trailing detection) I SH PU Input of horizontal drive signal originating from subcarrier. Active when EXTI is low level. When this is inactive, GHS (No. 33) is internally connected.
23	GENH	H. synchronizing digital phase comparison input (trailing detection) I SH PU Input for external synchronization, horizontal synchronization and phase adjustment. Active when EXTI is high level. When this is inactive, HD (No. 119) is internally connected.

Pin No.	Pin Name	Function
24	SHS2	Shutter speed setting 2 Random shutter setting function (Refer to the specifications.) I PU
25	SHS1	Shutter speed setting 1 Random shutter setting function (Refer to the specifications.) I PU
26	SHS0	Shutter speed setting 0 Random shutter setting function (Refer to the specifications.) I PU

SHS2	SHS1	SHS0	Shutter speed NTSC	PAL
L	L	L	1/60	1/50
L	L	H	1/100	1/120
L	H	L	1/250	
L	H	H	1/500	
H	L	L	1/1000	
H	L	H	1/2000	
H	H	L	1/4000	
H	H	H	1/10000	

Pin No.	Pin Name	Function
27	VSYN	V. sync. output 0 9 Vertical synchronizing signal of V. EQ pulse width.
28	TR2	Sync. reset mode setting I PU For sync. reset mode setting when random shutter setting functions is activated.
29	TRG	Trigger input I PU Trigger input to activate random shutter setting function. (Refer to the random shutter specifications.)
30	VDD	+5V power supply
31	GND	Ground
32	CSI	Ext. composite sync. signal input I SH PU To input external composite synchronizing signal for horizontal and vertical separation and ext. sync. signal input detection.
33	GHS	Horizontal separate sync. 0 9 Horizontal separate signal of external composite synchronizing signal. 1/2 equivalent pulse is not included.
34	GVS	Vertical separate sync. 0 9 Vertical separate signal of external composite synchronizing signal. 1/2 equivalent pulse is not included.

Pin No.	Pin Name	Function
35	VR	Vertical reset I PU External synchronizing input by slip system. If this system is input in vertical sync. period, hard reset is activated. Input in other period stops internal counter for a period of pulse width.
36	HR	Horizontal reset I PU Presets horizontal component 1T before rise of HD. Jitters in a period shorter than 140 ns are absorbed. However, operation is not secured for continuous input.
37	SR	System reset I PU Inside of IC is forcibly initialized regardless of internal or external synchronization. VR and HR inputs are ineffective. Jitters in a period shorter than 140 ns are absorbed.
38	EXTI	Internal/External synchronization setting input I PD L : Internal synchronization H : External synchronization
39	EXTO	Internal/External synchronization setting output O 9 L: Without CSI input After detection of no SHS, another SHS is not detected for a period of 8 fields. H: With CSI input After detection of SHS, 200 or more SHS's are detected in 1 vertical period.
40	CROS	Cross ON/OFF input I PD L: To stop cross output H: To activate cross output operation For detail, refer to supplementary specifications of respective terminals.
41	CLIN	Cross output O 9 To output a cross in the center of screen. For detail, refer to supplementary specifications of respective terminals.
42	TSTE	Test terminal E I PU Set this terminal open in general.
43	LR	Line reset O 9 When EXTI is external synchronization (High level), setting signal is supplied to LSW. When internal burst is ahead of external burst in phase, High level is output. When internal burst is behind external burst in phase, Low level is output (for 6 clocks of SC). Phase comparison is not operated for one field after output. For detail, refer to supplementary specifications of respective terminals.

Pin No.	Pin Name	Function
44	EXBF	Brust flag separate output With detection of one or more H. sync pulse from CSI input, pulse whose width is for 6 cycles of subcarrier is output. For details, refer to supplementary specifications of respective terminals. O 9
45	HBSL	H. blanking reset To switch output position of IFHB (106). L: System delay 900 ns approx. H: System delay 450 ns approx. I PU
46	TSTD	Test terminal D Set this terminal open in general. BI PU 9
47	TSTC	Test terminal C Set this terminal open in general. BI PU 9
48	TSTB	Test terminal B Set this terminal open in general. I PU
49	VCFM	VTR color frame Color frame for VTR exclusively. 2-field period for NTSC1, NTSC2 and PAL. 4-field period for PAL1, PAL2 and SECAM. O 9
50	CFMI	Color frame input Effective with EXTI being low level. Used for color frame control in external synchronization. Reset to synchronizing circuit by the slip system. I SH PU
51	CFMO	Color frame output Pulse output at the beginning of every color frame. 4-field period for NTSC1 and NTSC2. 8-field period for PAL1, PAL2, PALM and SECAM. O 9
52	TSTA	Test terminal A Set this terminal open in general. I PU
53	TST9	Test terminal 9 Set this terminal open in general. I PU

Pin No.	Pin Name	Function
54	TST8	Test terminal 8 Set this terminal open in general. I PU
55	DRST	Direct reset terminal When EXTI is low level, the following operations are realized. To switch reset operation of horizontal counter for subcarrier. To reset color frame synchronizing with horizontal counter with High level; To reset color frame with Low level. I PU
56	SC	Subcarrier output To monitor subcarrier signal connected internally with digital phase comparator. When phase of SC1 (68) is 0°, this output is inphase. O 9
57	INSC	Internal subcarrier input Shall be connected with SC (56). Effective when EXBF is low level. Pulse rise is detected. I
58	EXSC	External subcarrier input Effective when EXBF is low level. Pulse rise is detected. I
59	EOS	Digital phase comparison output for subcarrier As compared with leading edge of EXSC; when internal SC has advanced phase : Low level, when internal SC has lagged phase : High level, when internal SC is in phase : High impedance. O TR 13
60	GND	Ground
61	VDD	+5V power supply
62	FSCO	Oscillator output for subcarrier O
63	FSCI	Oscillator input for subcarrier I
64	2FSC	Double subcarrier output Half-divided oscillator output for subcarrier O 13

Pin No.	Pin Name	Function
65	4SC	1/4 subcarrier output 1/4-divided output of subcarrier frequency O 9
66	2SC	1/2 subcarrier output 1/2-divided output of subcarrier frequency O 9
67	GND	Ground
68	SC1	Subcarrier 1 Subcarrier frequency output. Phase is changed by SCP1 and SCP2. In PAL mode, phase is not changed every H. O 9
69	SC2	Subcarrier 2 Subcarrier frequency output whose phase is 90° ahead of SC1. Phase is changed by SCP1 and SCP2. In PAL mode, phase is inverted by 180° every H. O 9
70	SCP1	Subcarrier select 1 Note: SC2 is expressed based on SC1. I PD
71	SCP1	Subcarrier select 2 I PD
72	SCHD	Subcarrier horizontal driver Horizontal drive pulse originating from subcarrier frequency. O 13
73	TR0	Random shutter control system setting input To set random shutter control system. L: 8-stage default control, H: Pulse width continuous control (Refer to the specifications of random shutter setting function.) I PD
74	SI	Stroboscope index output In normal operation, this output is for stroboscopic lamp emitting time. In random shutter operation, this output is for video output time. (Refer to the specifications of random shutter setting function.) O 9

SCP2	SCP1	SC1	SC2
L	L	0°	90° ahead (270°)
L	H	90°	90° ahead (0°)
H	L	180°	90° ahead (90°)
H	H	270°	90° ahead (180°)

Pin No.	Pin Name	Function
75	GND	Ground
76	TR1	Random reset system setting input To determine reset system setting system. L: SYNC reset system, H: SYNC non-reset system. (Refer to the specifications of random shutter setting function.) I PD
77	SHCT	Shutter control output Electronic shutter control signal. Shall be connected to SHCT (19) of TG (μPD9438GK). (Refer to the specifications of random shutter setting function.) O 9
78	CBMD	SMPTE/FULL To switch color bar signal to SMPTE or FULL. L: Full Field mode H: SMPTE mode Effective only with BAR signal of low level. I PU
79	M4BK	Color bar signal o 9
80	P4BK	Color bar signal o 9
81	Q	Color bar signal o 9
82	W	Color bar signal o 9
83	I	Color bar signal o 9

	BAR	CBMD	I	W
NTSC1 NTSC2	H L L	X H L	L Effective L	L Effective (75%W) L
PAL1 PAL2	H L L	X H L	L Effective L	L Effective (75%W) Effective (100W)
PALM	H L L	X H L	L Effective L	L Effective (75%W) Effective (100W)
SECAM	H L L	X H L	L Effective L	L Effective (75%W) L

	Q	P4BK	M4BK
NTSC1 NTSC2	L Effective L	L Effective L	L Effective L
PAL1 PAL2	L Effective L	L Effective L	L Effective L
PALM	L Effective L	L Effective L	L Effective L
SECAM	L Effective L	L Effective L	L Effective L

Pin No.	Pin Name	Function
84	–R	Color bar signal O 9
85	G	Color bar signal O 9
86	B	Color bar signal O 9

	BAR	C3MD	B	G	R
NTSC1 NTSC2	H L	X X	L Effective	L Effective	L Effective
PAL1 PAL2	H L	X X	L Effective	L Effective	L Effective
PALM	H L	X X	L Effective	L Effective	L Effective
SECAM	H L	X X	L Effective	L Effective	L Effective

Pin No.	Pin Name	Function
87	BAR	Color bar control (ON/OFF) I PU

BAR	R, G, B, I, Q, W, P4BK, M4BK
L	Effective
H	Fixed at Low level

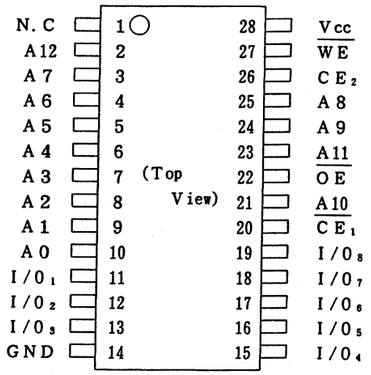
Pin No.	Pin Name	Function
88	TST2	Test terminal 2 Set this terminal open in general. I PU
89	TST1	Test terminal 1 Set this terminal open in general. I PU
90	VDD	+5V power supply
91	GND	Ground
92	TST5	Test terminal 5 Set this terminal open in general. I PU
93	TST6	Test terminal 6 Set this terminal open in general. I PU
94	TST7	Test terminal 7 Set this terminal open in general. O 9
95	PGP	Pilot gate pulse Uniform voltage level of two signals, one passes the 1FH delay line and the other does not pass the 1H line, with each other in order to compensate attenuation caused by the delay line. O 9
96	PTP1	Pilot pulse 1 Uniform voltage level of two signals, one passes the 1H delay line and the other does not pass the 1H line, with each other in order to compensate attenuation caused by the delay line. O 9
97	PTP2	Pilot pulse 2 Used to control video level. O 9
98	2FH	Double FH O 9

NTSC1	NTSC2	PAL1	PAL2	PALM	SECAM
31.468	31.468	31.25	31.25	31,468	31.25

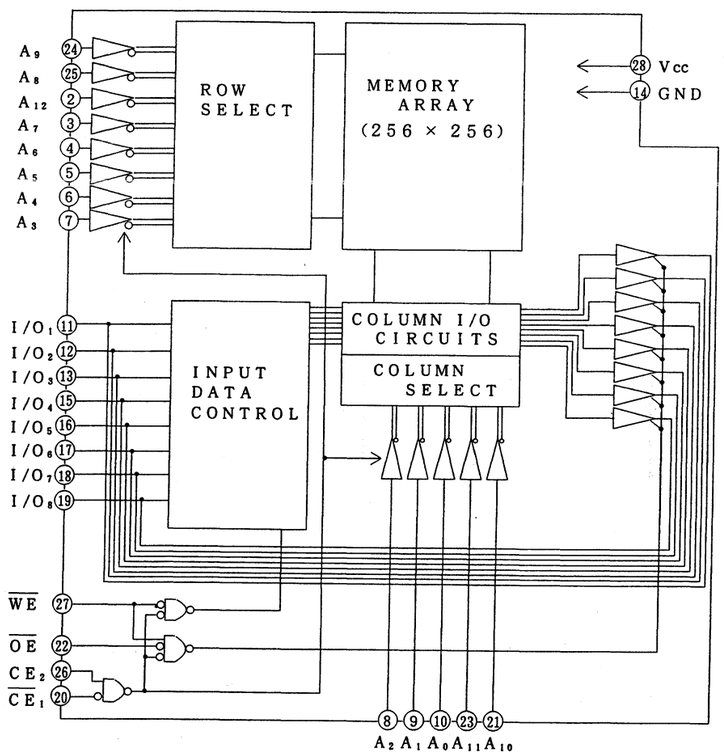
Pin No.	Pin Name	Function
99	FH4	1/4FH Half-divided output of LSW. Equivalent to 25 Hz in PAL mode. O 9
100	BF	Burst flag Regulates period to insert subcarrier into back porch of horizontal sync. signal. Functions to switch chromaticity signal for every line in SECAM mode. O 9
101	CP	Clamp pulse Signal to clamp reference voltage of black level. O 9
102	BCP1	Black clamp pulse 1 Fixes black level of CCD output signal. O 9
103	BCP2	Black clamp pulse 2 Fixes black level of CCD output signal (at every H output). O 9
104	OBCS	Optical black pulse select Switching of output position of horizontal BCP1 and BCP2. L: Frontward output H: Backward output I PU

Pin No.	Pin Name	Function
105	GND	Ground
106	IFHB	Interface horizontal blanking Output pulse that is narrower than HBLK both in leading edge and trailing edge. O 9
107	IFVS	Interface vertical synchronization Normal function: To output vertical synchronization signal having the same pulse width of V. EQ pulse. Random shutter setting function: To output the same signal as V. sync. signal in the fall time. O 9
108	FI	Field index Field discrimination signal. L: Field that HD and VD fall at the same time. H: Field that there is a time lag of 0.5H in falling between HD and VD. O 9
109	VD	Vertical drive pulse Pulse output at the beginning of every field. Used as the vertical timing standard for the set. O 9
110	DVD	Delayed vertical drive pulse Vertical drive signal that lags behind VD pulse. Controls camera's scanning timing and regulates activation time of sawtooth waveform of vertical deflection circuit. O 9
111	CHD	Delayed horizontal drive pulse Controls camera's scanning timing. Regulates activation time of sawtooth waveform of horizontal deflection circuit. O 9
112	GND	Ground
113	PBLK	Pre-blanking Composite blanking signal used for video processing. As compared with CBLK signal, this signal is narrower in the leading edge. O 9
114	CBLK	Composite blanking Horizontal and vertical composite blanking signal. O 9
115	CSYN	Composite sync. Composite synchronizing signal comprising of four signals of HSYN, VSYN, EQ and SAW. O 9
116	VBLK	V. blanking Vertical blanking signal whose pulse width can be changed with VBW1 and VBW2. O 9
117	AHBL	Pre-horizontal blanking Pulse that HBLK is advanced in breaking of leading edge. O 9
118	HBLK	H. blanking Horizontal blanking pulse whose pulse width can be changed with HBW1 and HBW2. O 9
119	HD	H. drive Pulse synchronized with beginning of respective lines. Used as horizontal timing standard of the set. O 13
120	GND	Ground

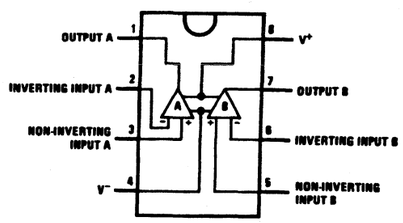
■ LH5168N-10L 【SHARP】
(64K SRAM)



Name	Signal
$A_0 \sim A_{12}$	Address Input
$\overline{CE_1}/CE_2$	Chip Enable
$\overline{WE}$	Write Enable
$\overline{OE}$	OUTPUT
$I/O_1 \sim I/O_8$	Data I/O
N.C.	Non Connection

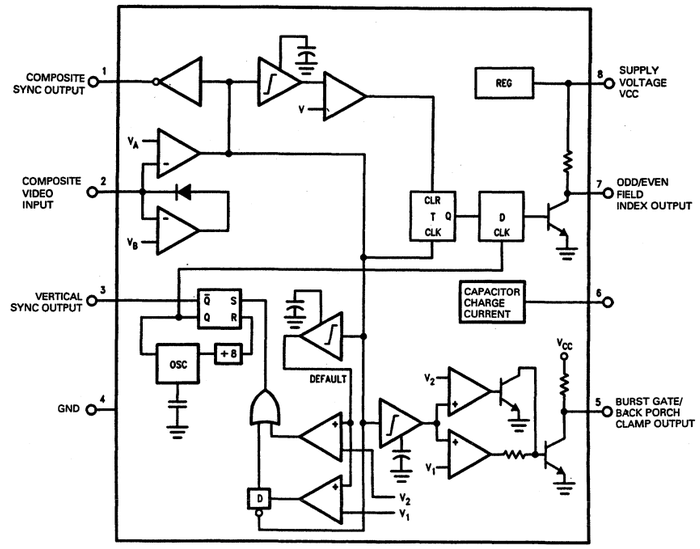


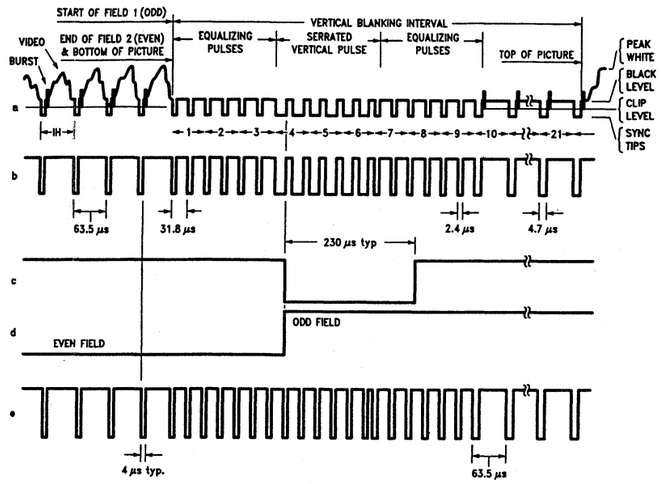
■ LMC6082IM 【National Semiconductor】
(Precision CMOS Dual Op.Amp)



Top View

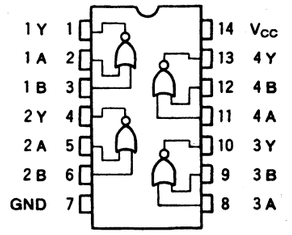
■ LM1881M 【National Semiconductor】
(Video Sync Separator)





(a) Composite Video; (b) Composite Sync; (c) Vertical Output Pulse;
(d) Odd/Even Field Index; (e) Burst Gate/Back Porch Clamp

■ MC74HC02AF 【MOTOROLA】
(Quad 2-Input NOR Gates)

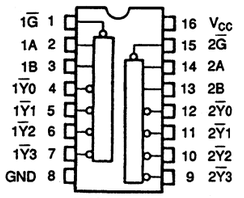


(TOP VIEW)

TRUE Table

A	B	Y
L	L	H
L	H	L
H	L	L
H	H	L

■ MC74HC139AF 【MOTOROLA】
(Dual 2-Line to 4-Lile Decoders/ Demultiplexers)



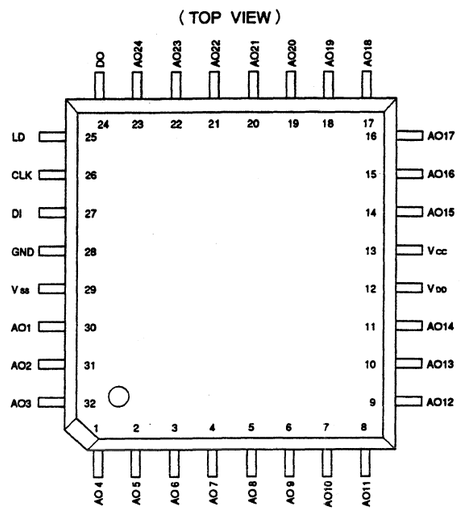
(TOP VIEW)

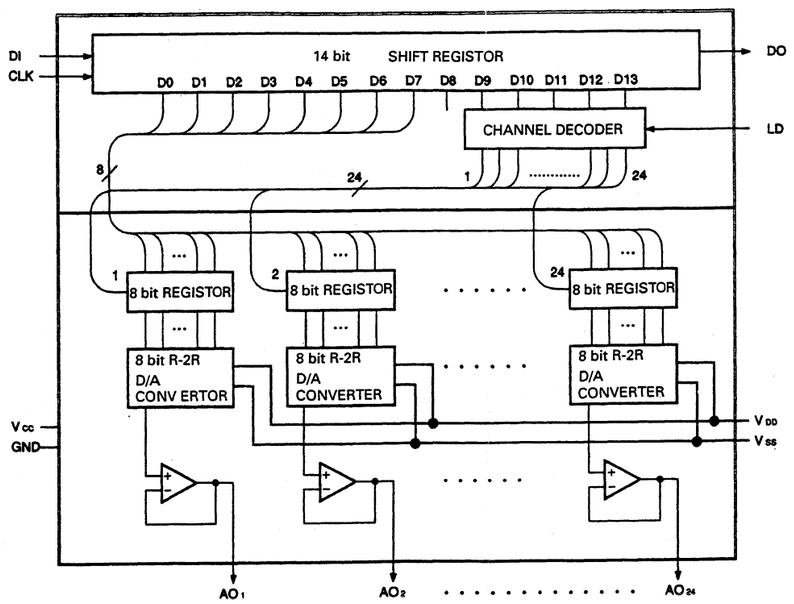
TRUE Table

INPUTS			OUTPUTS				SELECTED OUTPUT
ENABLE	SELECT						
G	B	A	Y0	Y1	Y2	Y3	
H	X	X	H	H	H	H	NONE
L	L	L	L	H	H	H	Y0
L	L	H	H	L	H	H	Y1
L	H	L	H	H	L	H	Y2
L	H	H	H	H	H	L	Y3

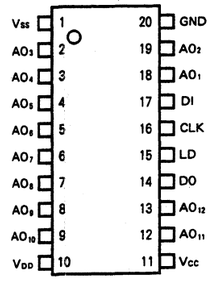
X : Don't care

■ MB88345PF 【FUJITSU】
(D/A Converter)

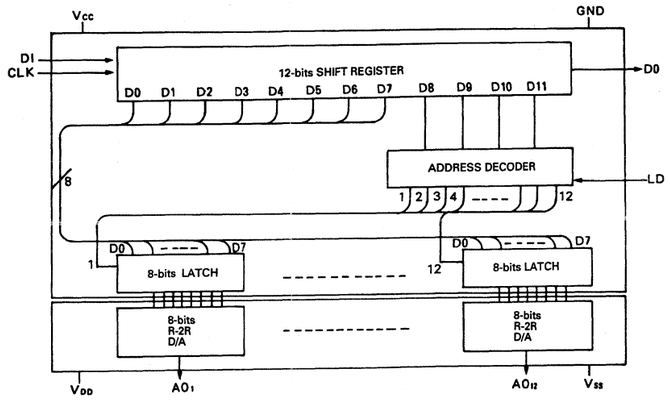




■ MB88341PV-ER 【FUJITSU】
(D/A Converter)

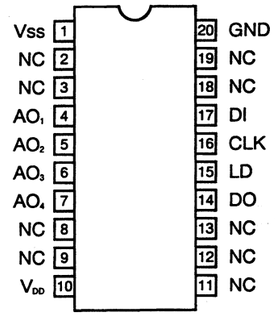


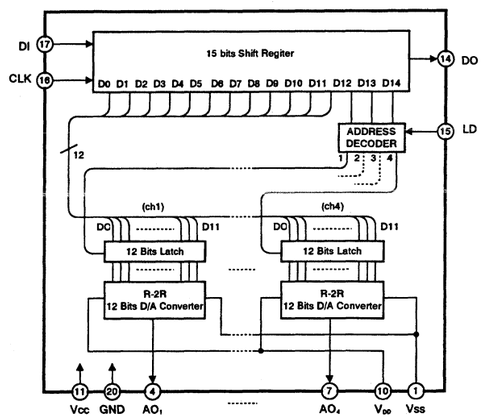
(TOP VIEW)



Symbol	Pin No. MB88341	I/O	Function
DI	17	I	For serial data (12 bits) input.
DO	14	O	For MSB data output of 12-bit shift register.
CLK	16	I	For shift clock input. Signal from DI pin is input to 12-bit shift register.
LD	15	1	With "H" input to LD pin, data of 12-bit shift register is loaded to decoder and D/A output register.
AO1 AO2 AO3 AO4 AO5 AO6 AO7 AO8 AO9 AO10 AO11 AO12	18 19 2 3 4 5 6 7 8 9 12 13	O	For 8-bits D/A output.
Vcc	11	—	Power source of MCU interface.
GND	20	—	GND of MCU interface
VDD	10	—	Power source of D/A converter.
Vss	1	—	GND of D/A converter.

■ MB88353PFV-ER 【FUJITSU】
(4 Ch 12 Bit D/A Converter)

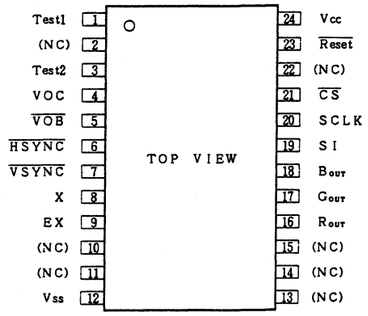


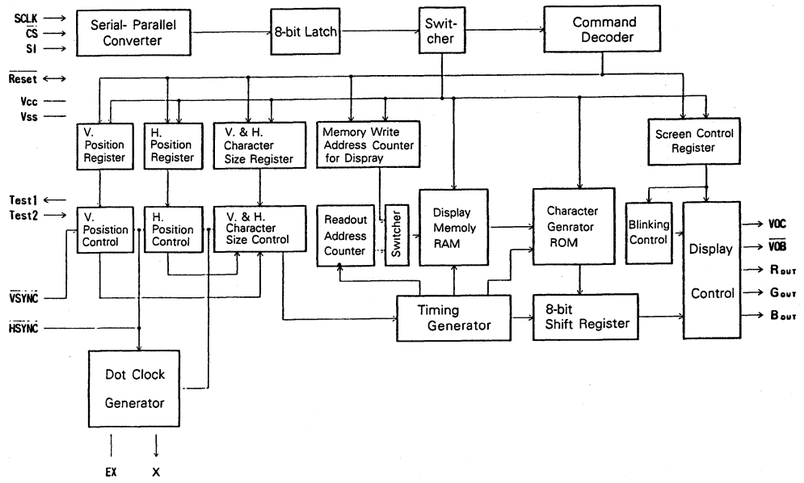


Symbol	Pin No. MB88341	I/O	Description
DI	17	I	For serial data (15-bit) input.
DO	14	O	For MSB data output of 15-bit shift register.
CLK	16	I	For shift clock input. Signal from DI pin is input to 15-bit shift register.
LD	15	I	With "H" input to LD pin, data of 15-bit shift register is loaded to decoder and D/A output register.
AO1 AO2 AO3 AO4	4 5 6 7	O	For 12-bits D/A output.
Vcc	11	—	Power source of MCU interface.
GND	20	—	GND of MCU interface.
VDD	10	—	Power source of D/A converter.
Vss	1	—	GND of D/A converter.

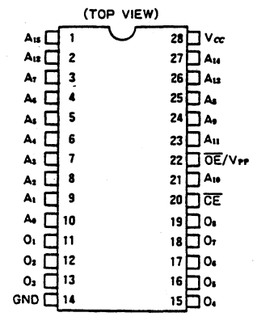
3-32

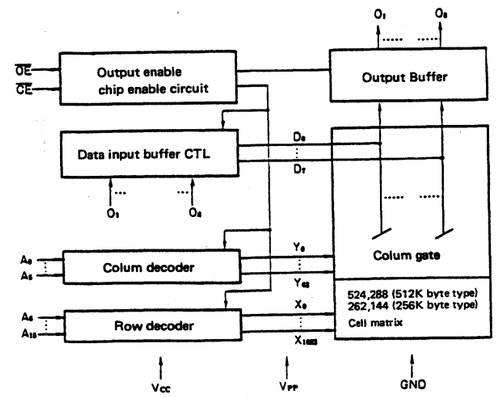
■ MB89012-109 【FUJITSU】
(TV Display Controler)





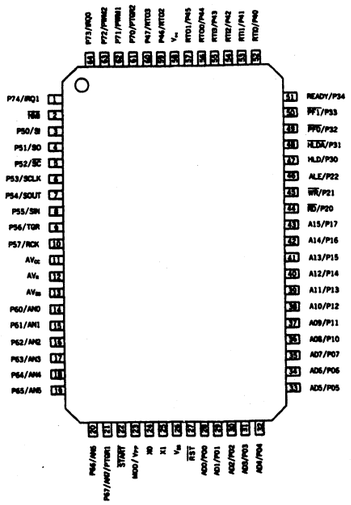
■ MBM27C512P-15 【FUJITSU】
(512K (64K×8Bit) EPROM)

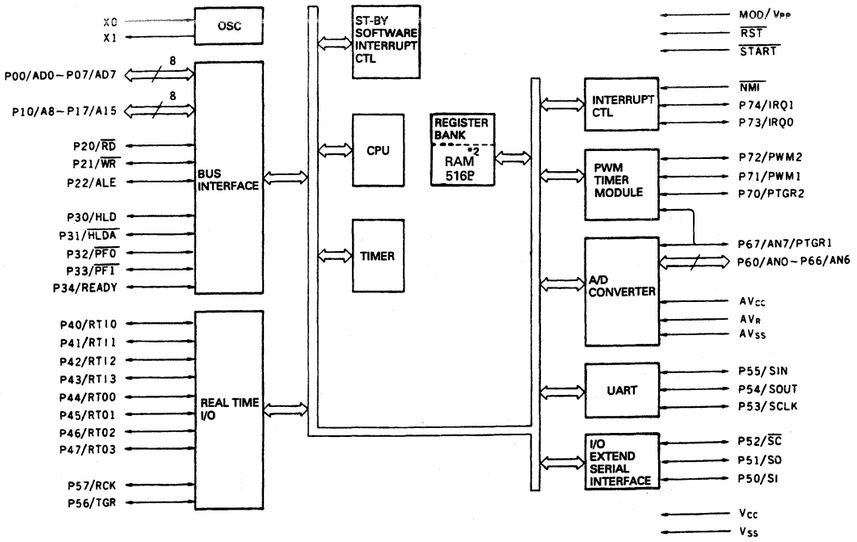




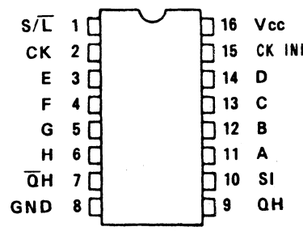
■ MB89T715AHPF 【MOTOROLA】
(8 Bit Micro Controller)

(TOP VIEW)



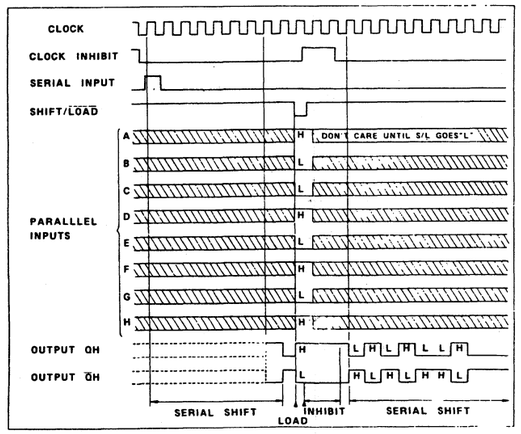


■ MC74HC165F 【MOTOROLA】
(8-Bit Serial or Parallel-In/Serial Out Shift Registers With Complementary Out)



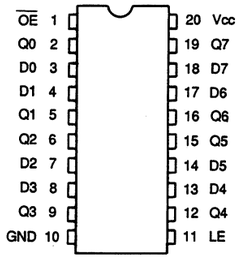
(TOP VIEW)

Timing chart



3-33

■ MC74HC373AF 【MOTOROLA】
(Octal D-Type Latch With NON-Inverted 3-State Output)

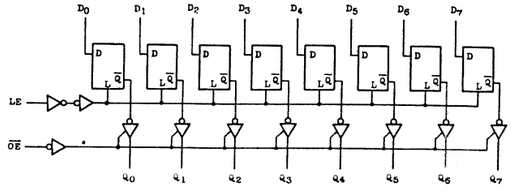


(Top View)

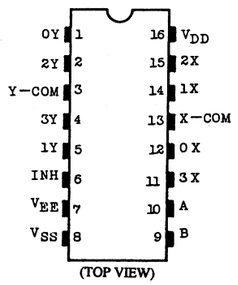
TRUE Table

INPUTS			OUTPUTS
$\overline{OE}$	LE	D	
H	X	X	Z
L	L	X	Q_n
L	H	L	L
L	H	H	H

X : Don't Care
Z : Hi impedance
Qn : Q output level before the LE become "L"



■ MC14052BF 【MOTOROLA】
(Dual 4 Channel Analog Multiplexers/ Demultiplexers)



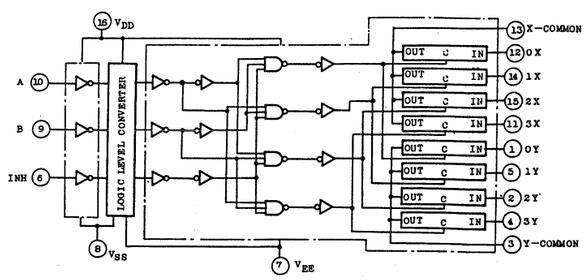
(TOP VIEW)

TRUTH TABLE

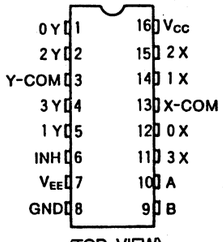
CONTROL INPUTS			"ON" CHANNEL
INHIBIT	B	A	TC4052BP TC4052BF
L	L	L	0X, 0Y
L	L	H	1X, 1Y
L	H	L	2X, 2Y
L	H	H	3X, 3Y
L	L	L	—
L	L	H	—
L	H	L	—
L	H	H	—
H	※	※	NONE

※ Don't Care

LOGIC DIAGRAM



■ MC74HC4052F 【MOTOROLA】
(Dual 4-Channel Analog Multiplexer)

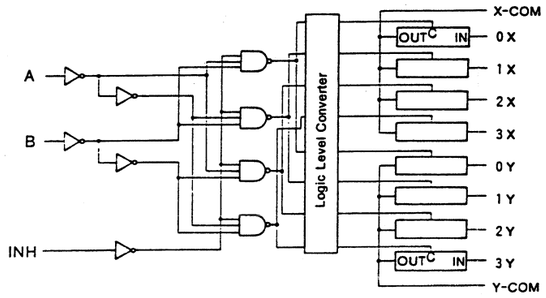


(TOP VIEW)

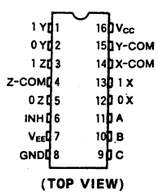
TRUE Table

CONTROL INPUTS			"ON" CHANNEL
INHIBIT	B	A	HC4052A
L	L	L	0X, 0Y
L	L	H	1X, 1Y
L	H	L	2X, 2Y
L	H	H	3X, 3Y
H	X	X	NONE

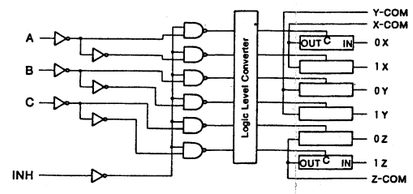
X : DON'T CARE



■ MC74HC4053F 【MOTOROLA】
(Triple 2-Channel Analog Multiplexer/ Demultiplexer)



(TOP VIEW)

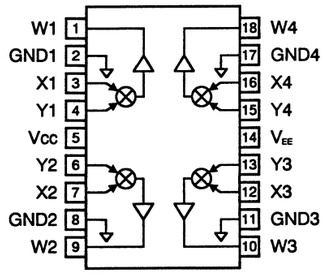


TRUE Table

CONTROL INPUTS				"ON" CHANNEL
INHIBIT	C*	B	A	HC4053A
L	L	L	L	0X, 0Y, 0Z
L	L	L	H	1X, 0Y, 0Z
L	L	H	L	0X, 1Y, 0Z
L	L	H	H	1X, 1Y, 0Z
L	H	L	L	0X, 0Y, 1Z
L	H	L	H	1X, 0Y, 1Z
L	H	H	L	0X, 1Y, 1Z
L	H	H	H	1X, 1Y, 1Z
H	X	X	X	NONE

X : DON'T CARE

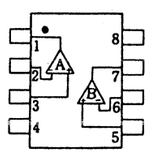
■ MLT04GS 【ANALOG DEVICES】
(4 Channel Multiplexer)



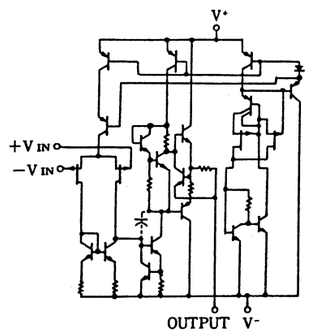
W=(X•Y)/2.5V

■ NJM062M 【JRC】
(J-FET Input Op.Amp)

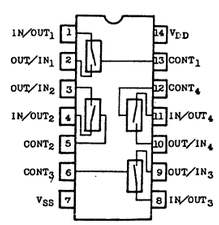
(Top View)



1. A OUTPUT
2. A−INPUT
3. A+INPUT
4. V-
5. B+INPUT
6. B−INPUT
7. B OUTPUT
8. V+



■ TC4066BF 【TOSHIBA】
(Quad Bilateral Switch)

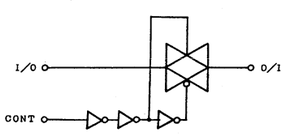


(TOP VIEW)

TRUTH TABLE

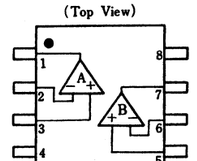
CONTROL	Impedance Between IN/OUT-OUT/IN ※
H	$0.5\sim5\times10^2\Omega$
L	$>10^9\Omega$

LOGIC DIAGRAM

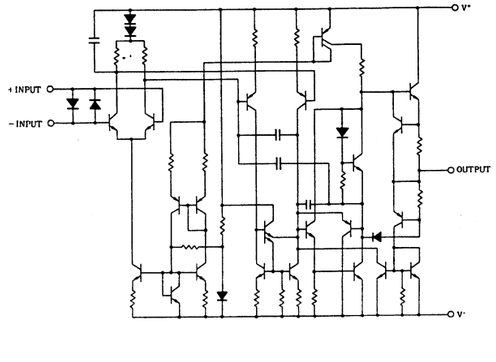


■ NJM5532M 【JRC】
(High Performance Dual Low-Noise Op.Amp)

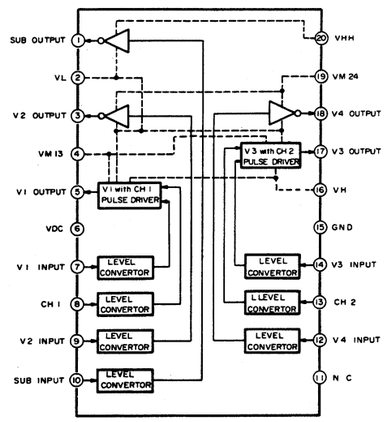
(Top View)



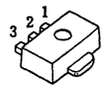
1. A OUTPUT
2. A−INPUT
3. A+INPUT
4. V-
5. B+INPUT
6. B−INPUT
7. B OUTPUT
8. V+



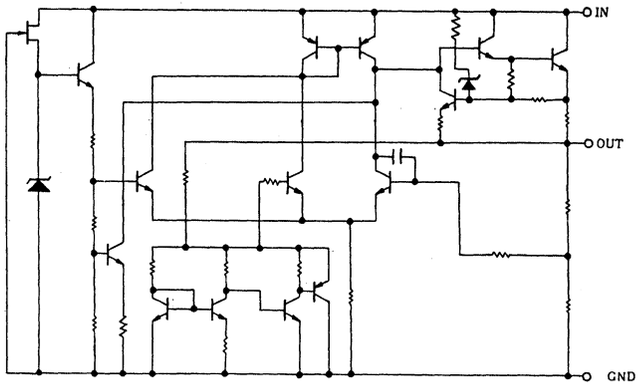
■ MN3112SA 【MATSUSHITA】
(Vertical Driver)



■ NJM78L05UA 【JRC】
(3-Terminal Positive Voltage Regulator (+5V))



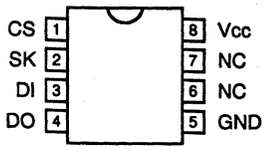
1. OUT
2. GND
3. IN



■ NJM78L09UA 【JRC】
(Refer to NJM78L05UA-TE1.)

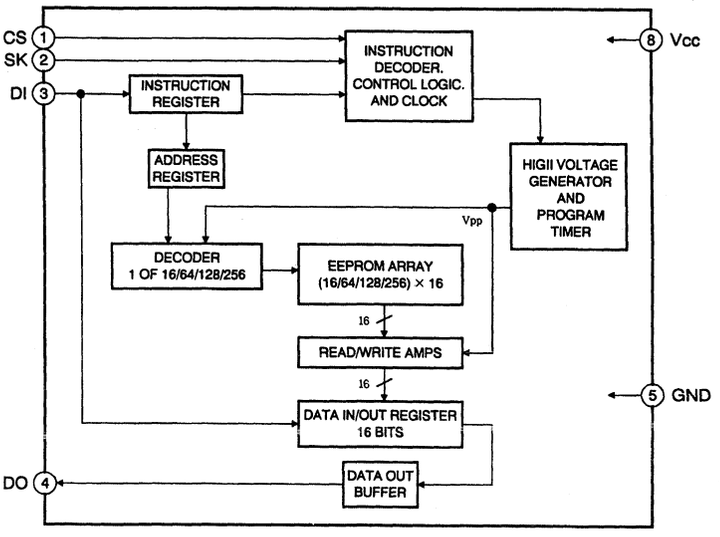
■ NJM78L15UA 【JRC】
(Refer to NJM78L05UA-TE1.)

■ NM93C66M8X 【National Semi Conductor】
(4096-Bit Serial EEPROM)

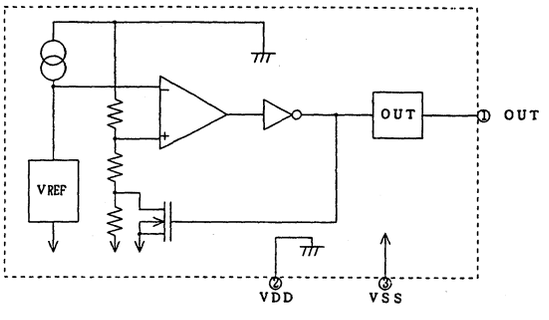


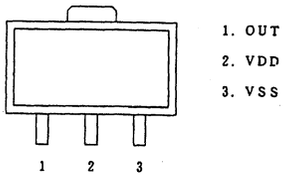
■ Pin funoction

Pin No.	Pin Name	
1	CS	Chip Select
2	SK	Serial Data Clock
3	DI	Serial Data Input
4	DO	Serial Data Output
5	GND	Ground
8	Vcc	Power supply



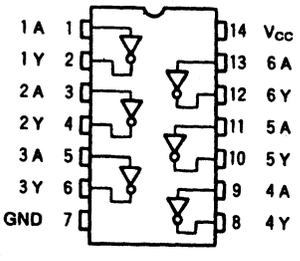
■ S-8054HNCB 【SEIKO INSTRUMENTS】
(C-MOS Voltage Detector)





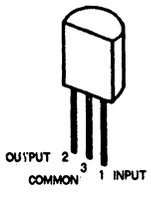
1. OUT
2. VDD
3. VSS

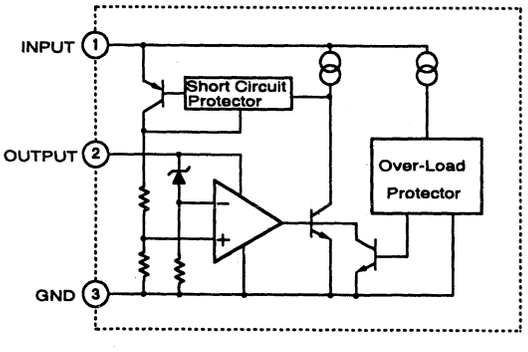
■ TC74HC04AF 【TOSHIBA】
(Hex Inverters)



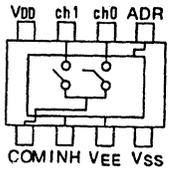
(TOP VIEW)

■ TA7809F 【TOSHIBA】
(3-Terminal Positive Voltage Regulator (+9V))

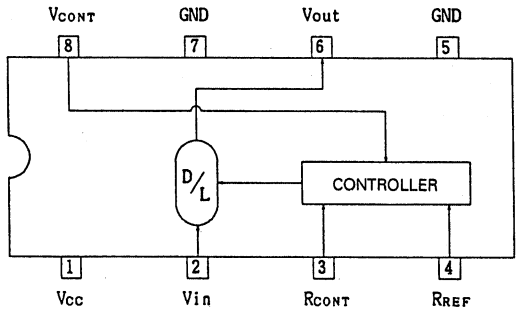




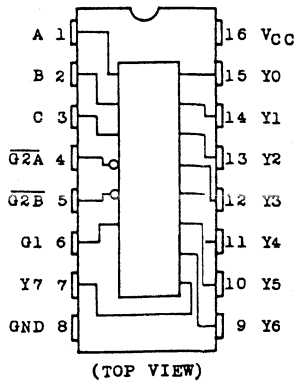
■ TC4W53F 【TOSHIBA】
(2-Channel Multiplexer)



■ TK16031M 【TOKO】
(Delay Line)



■ TC74HC238AF 【TOSHIBA】
(3-Line to 8-Line Decoders/ Demultiplexers)

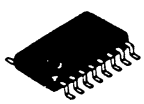


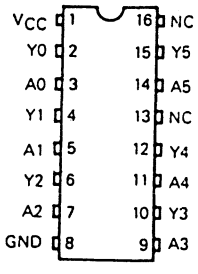
TRUE Table

INPUTS						OUTPUTS								SELECTED OUTPUT
ENABLE			SELECT											
$\overline{G2B}$	$\overline{G2A}$	G1	C	B	A	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	
X	X	L	X	X	X	L	L	L	L	L	L	L	L	NONE
X	H	X	X	X	X	L	L	L	L	L	L	L	L	NONE
H	X	X	X	X	X	L	L	L	L	L	L	L	L	NONE
L	L	H	L	L	L	H	L	L	L	L	L	L	L	Y0
L	L	H	L	L	H	L	H	L	L	L	L	L	L	Y1
L	L	H	L	H	L	L	L	H	L	L	L	L	L	Y2
L	L	H	L	H	H	L	L	L	H	L	L	L	L	Y3
L	L	H	H	L	L	L	L	L	L	H	L	L	L	Y4
L	L	H	H	L	H	L	L	L	L	L	H	L	L	Y5
L	L	H	H	H	L	L	L	L	L	L	L	H	L	Y6
L	L	H	H	H	H	L	L	L	L	L	L	L	H	Y7

X : DON'T CARE

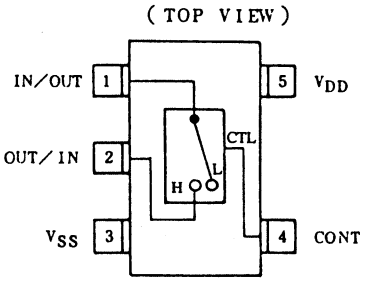
■ TC74HC4050AFS 【TOSHIBA】
(Buffer)





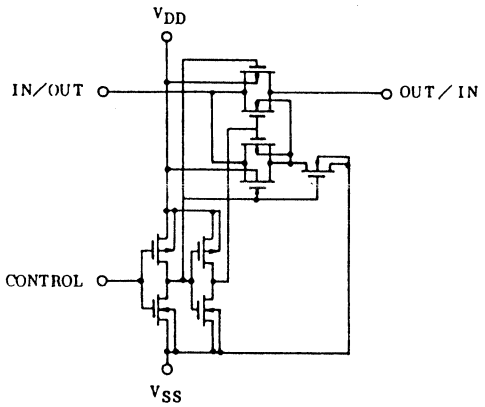
NC = No Connection

■ TC4S66F 【TOSHIBA】
(Bilateral Switch)

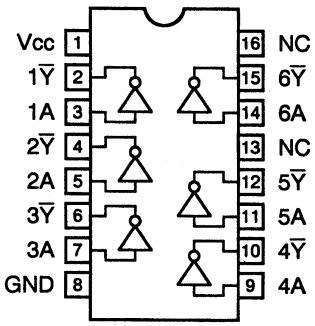


CONTROL	IMPEDANCE BETWEEN IN/OUT - OUT/IN ※
H	$0.5 \sim 5 \times 10^2\ \Omega$
L	$> 10^9\ \Omega$

※ See Electrical Characteristics



■ TC74HC4049AFS 【TOSHIBA】
(Hex Buffer/Converter (Inverter))

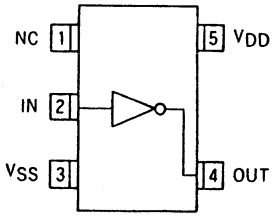


■ Ture Table

A	Y
L	H
H	L

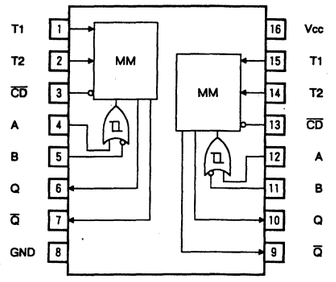
■ TC7S04F 【TOSHIBA】
(Invertor)

Pin arangement



■ TC74VHC04FS 【TOSHIBA】
(Refer to TC74HC04AF.)

■ TC74HC4538AFS 【TOSHIBA】
(Dual Retriggerable Monostable Multivibrator)

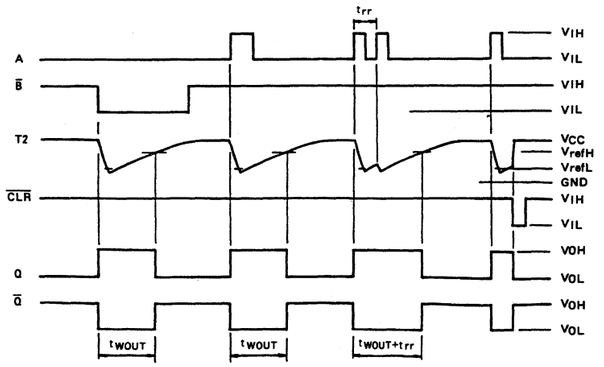


TOP VIEW

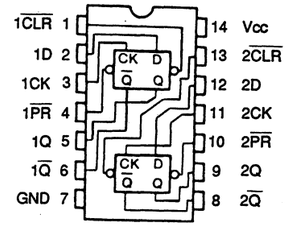
TRUE Table

INPUT			OUTPUT		NOTE
A	B	CD	Q	Q	
↓	H	H	⊓	⊔	OUTPUT ENABLE
X	L	H	L	H	INHIBIT
H	X	H	L	H	INHIBIT
L	↓	H	⊓	⊔	OUTPUT ENABLE
X	X	L	L	H	INHIBIT

X:Don't Care



■ TC74VHC74FS 【TOSHIBA】
(Dual D-Type Positive-EDGE-Triggered Flip-Flops With Preset AND Clear)



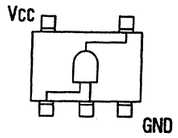
(Top View)

TRUE Table

INPUTS				OUTPUTS		FUNCTION
CLR	PR	D	CK	Q	Q	
L	H	X	X	L	H	CLEAR
H	L	X	X	H	L	PRESET
L	L	X	X	H	H	—
H	H	L	↑	L	H	—
H	H	H	↑	H	L	—
H	H	X	↓	Q_n	$\overline{Q}_n$	NO CHANGE

X : Don't care

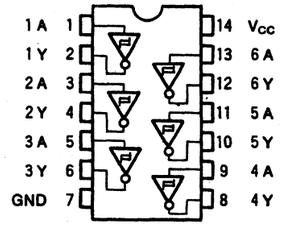
■ TC7S08F 【TOSHIBA】
(2 Input Single AND Gate)



TRUE Table

A	B	X
L	L	L
L	H	L
H	L	L
H	H	H

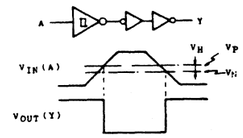
■ TC74VHC14FS 【TOSHIBA】
(Hex Schmitt-Trigger Inverters)



(TOP VIEW)

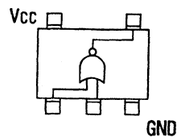
TRUE Table

A	Y
L	H
H	L



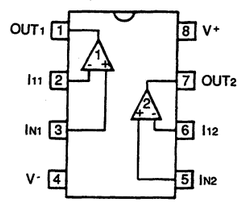
Vcc=4.5 V V_P=2.7 V typ.
V_N=1.6 V typ.

■ TC7S02F 【TOSHIBA】
(2 Input Single NOR Gate)

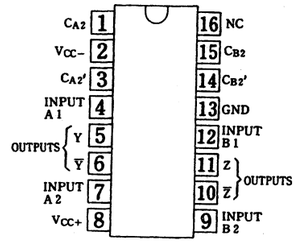


■ TC7SU04F 【TOSHIBA】
(Refer to TC7S04F.)

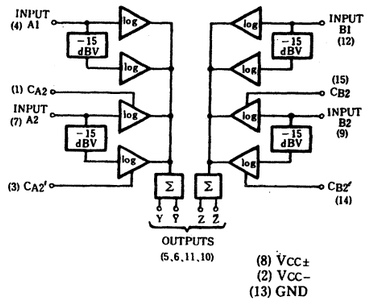
■ TL441CNS 【TEXAS】
(Log Amp)



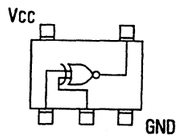
■ UPC812G2 【NEC】
(Op.Amp.)



(TOP VIEW)



■ TC7S86F 【TOSHIBA】
(Single Exelusive OR Gate)

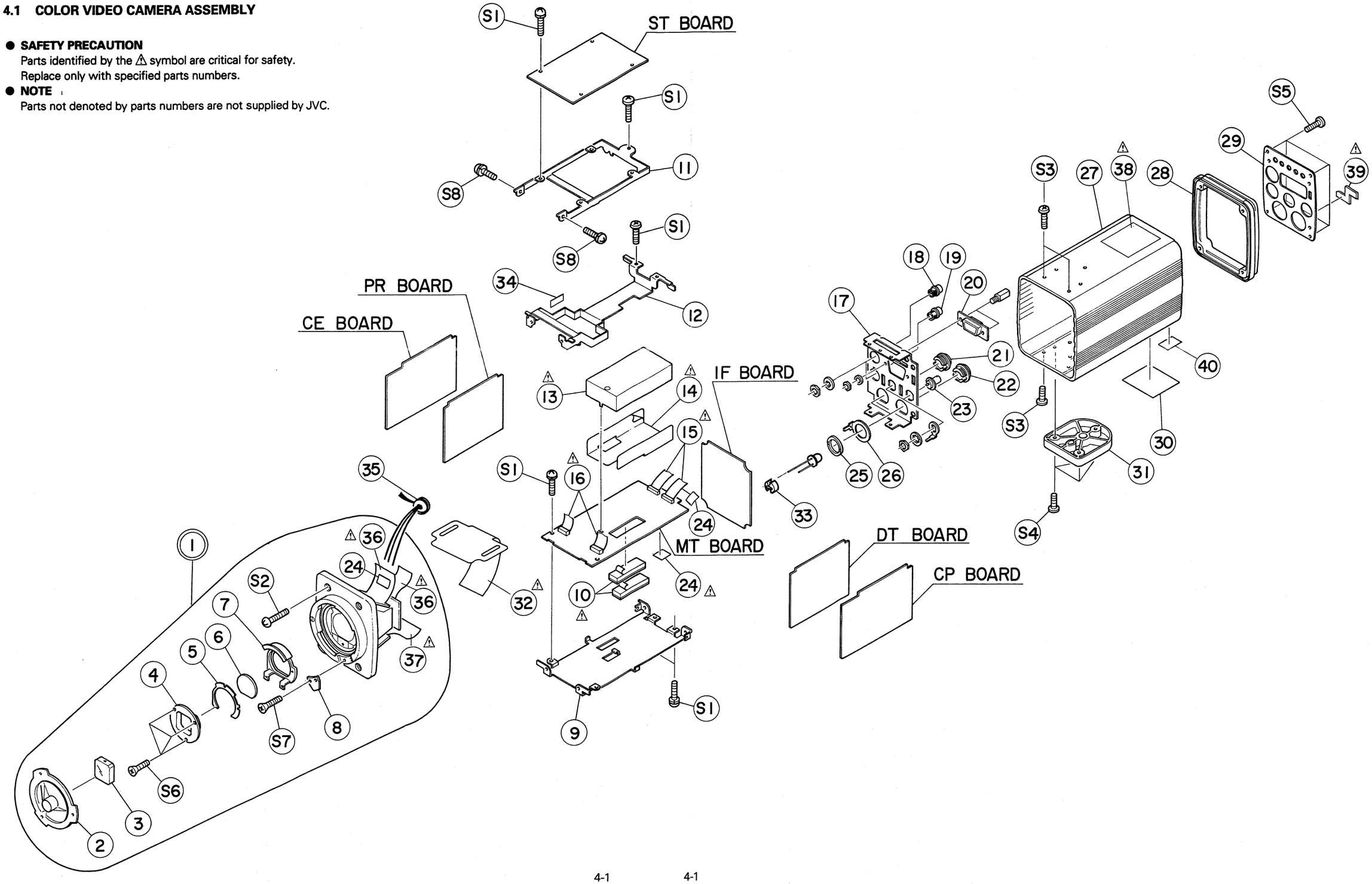


3-37

SECTION 4
EXPLODED VIEW AND ASSEMBLY PARTS LIST

4.1 COLOR VIDEO CAMERA ASSEMBLY

- **SAFETY PRECAUTION**
  Parts identified by the ⚠ symbol are critical for safety.
  Replace only with specified parts numbers.
- **NOTE**
  Parts not denoted by parts numbers are not supplied by JVC.



4.2 KY-F32 ASSEMBLY LIST M1

M1MM

Symbol No.	Part No.	Part Name	Description
1	SCM0897-N0A	OPTICAL BLOCK ASSEMBLY	NTSC
1	SCM0897-P0A	OPTICAL BLOCK ASSEMBLY	PAL
2	SC43825-002	CAP	
3	SC44493-004	FILTER	
4	SC31300-003	HOLDER	
5	SC45830-001	FILTER SHEET	
6	SC43840-001	FILTER	
7	SC31964-001	FILTER HOLDER	
8	SC43855-001	LEVER	
9	SC31967-002	BOTTOM FRAME	
⚠ 10	SC45834-002	SHEET	
11	SC31966-002	ST BRACKET	
12	SC31965-012	TOP FRAME	
⚠ 13	SCV2672-002	AC-DC CONVERTER	
⚠ 14	SC45932-002	SHEET	
⚠ 15	SSV2605-2005	FLAT CABLE	IF board – MT board
⚠ 16	SSV2605-2411	FLAT CABLE	ST board – MT board
17	SC31963-002	REAR PLATE	
18	SCV1743-001	CONNECTOR	
19	SCV1695-001	CONNECTOR	
20	SCV2373-A09	CONNECTOR	PAL (mm type)
20	SCV2373-B09	CONNECTOR	NTSC (inch type)
21	SCV2375-S06	CONNECTOR	
22	QMDB108-001	CONNECTOR	
23	CEMB006-00A	BNC CONNECTOR	
24	SC45564-003	SHEET	
25	SC45586-001	NUT	
26	SC45831-001	LUG	
27	SC20615-022	COVER	
28	SC20614-002	REAR FRAME	
29	SC31962-001	REAR PANEL	
30	———	NAME PLATE	SS47382-001
31	SC31968-001	BASE	
⚠ 32	SC45948-001	SHIELD PLATE	
33	SC43656-025	LED SPACER	2.5 mm (LD301, 302)
34	SC45564-004	SHEET	
35	QHX5092-001	WIRE CLAMP	
⚠ 36	SSV2605-2008	FLAT CABLE	ISB/ISG board – ST board
⚠ 37	SSV2605-2011	FLAT CABLE	ISR board – ST board
⚠ 38	SC45622-001	CAUTION LABEL	NTSC
⚠ 39	SC45455-021	LABEL	NTSC
40	SC45925-001	CE LABEL	PAL
S1	SDSP2604R	SCREW	M2.6×4
S2	SC43397-008	SCREW	
S3	SPSP2604N	SCREW	M2.6×4
S4	SPSP2606N	SCREW	M2.6×6
S5	SPSP2614N	SCREW	M2.6×14
S6	SSSK2040M	SCREW	M2×4.0
S7	SSSP2604M	SCREW	M2.6×4
S8	LPSP2606Z	SCREW	M2.6×6

SECTION 5
ELECTRICAL PARTS LIST

SAFETY PRECAUTION:
Parts identified by the ⚠ symbol are critical for safety. Replace only with specified parts numbers.
For maximum reliability and performance, all other replacement parts should be identical to those specified.

NOTE:
- Parts not denoted by parts numbers are not supplied by JVC.
- Abbreviations in this list are as follows:

RESISTORS

In the "Description" column:
All resistance values are in ohms (Ω).
K expresses kilo-ohm (1 000 ohms, kΩ).
M expresses mega-ohm (10^6 ohms, MΩ).

In the "Parts Name" column:

COMP. RESISTOR	:	Composition Resistor
U.F. RESISTOR	:	Non-inflammable Resistor
O.M.F. RESISTOR	:	Oxide Metalized Film Resistor
FUSI. RESISTOR	:	Fusible Resistor
M.P. RESISTOR	:	Metal Plate Resistor
M.G. RESISTOR	:	Metal Graze Resistor
M.F. RESISTOR	:	Metal Film Resistor
W.W. RESISTOR	:	Wire Wound Resistor

CAPACITORS

In the "Description" column:
All capacitance values are in microfarad (μF) unless otherwise indicated.
P expresses picofarad (10^{-12} farad, pF).

In the "Parts Name" column:

TRIM. CAPACITOR	:	Trimmer Capacitor
CER. CAPACITOR	:	Ceramic Capacitor
E. CAPACITOR	:	Electrolytic Capacitor
TAN. CAPACITOR	:	Tantalum Capacitor
MPP CAPACITOR	:	Metalized Polypropylene Capacitor
O.F. CAPACITOR	:	Oil Film Capacitor
MPF CAPACITOR	:	Metalized Polyfilm Capacitor
F.M. CAPACITOR	:	Film Mica Capacitor
P.P. CAPACITOR	:	Polypropylene Capacitor
P.S. CAPACITOR	:	Polystyrene Capacitor

Note: In the "Description" column of the parts list, (U) means the parts for the U version while (E) is for the E Version.

Symbol No.	Part No.	Part Name	Description		
IC1	SCV1585-064	I.C.(M)	JVC	(U)	← for U version
	SCV1585-067	I.C.(M)	JVC	(E)	← for E version

5.1 ST BOARD ASSEMBLY LIST [0][1]

SCK2450-01-N0A (U)

SCK2450-01-P0A (E) [0][1]□□□□□□□

Symbol No.	Part No.	Part Name	Description
IC1	CXD1265R	I.C.(M)	SONY
IC2	NJM78L15UA	I.C.(M)	JRC
IC3	MN3112SA	I.C.(M)	MATSUSHITA
IC4	MN3112SA	I.C.(M)	MATSUSHITA
IC5	MN3112SA	I.C.(M)	MATSUSHITA
IC6	NJM062M	I.C.(M)	JRC
IC7	NJM062M	I.C.(M)	JRC
IC8	TC7S02F	I.C.(M)	TOSHIBA
IC9	TC7S04F	I.C.(M)	TOSHIBA
IC10	TC7S04F	I.C.(M)	TOSHIBA
IC11	TC7S04F	I.C.(M)	TOSHIBA
IC12	TC74VHC14FS	I.C.(M)	TOSHIBA
IC13	TC7S02F	I.C.(M)	TOSHIBA
IC101	JCS0027	I.C.(M)	JVC
IC102	TC7SU04F	I.C.(M)	TOSHIBA
IC103	TC7SU04F	I.C.(M)	TOSHIBA
IC104	TC7SU04F	I.C.(M)	TOSHIBA
IC105	TC4W53F	I.C.(M)	TOSHIBA
IC106	TC74HC4050AFS	I.C.(M)	TOSHIBA
IC107	TC74HC4049AFS	I.C.(M)	TOSHIBA
IC108	NJM062M	I.C.(M)	JRC
IC109	TC7S86F	I.C.(M)	TOSHIBA
IC111	LM1881M	I.C.(M)	NATIONAL SEMICO
IC112	TC4W53F	I.C.(M)	TOSHIBA
IC113	AD8011AR	I.C.(M)	ANALOG DEVICES
IC114	AD817AR	I.C.(M)	ANALOG DEVICES
IC115	TC74HC4538AFS	I.C.(M)	TOSHIBA
IC116	UPC812G2	I.C.(M)	NEC
IC119	NJM5532M	I.C.(M)	JRC
IC120	NJM5532M	I.C.(M)	JRC
IC121	TC74HC4050AFS	I.C.(M)	TOSHIBA
IC251	TC74VHC74FS	I.C.(M)	TOSHIBA
IC252	CXL5504M	I.C.(M)	SONY
IC253	CXL5504M	I.C.(M)	SONY
IC254	CXL5504M	I.C.(M)	SONY
IC351	MB88341PV-ER	I.C.(M)	FUJITSU
Q1	2SA1462Y3Y4	TRANSISTOR	NEC
Q2	2SC3735(45)	TRANSISTOR	NEC
Q3	2SA1462Y3Y4	TRANSISTOR	NEC
Q4	2SC3735(45)	TRANSISTOR	NEC
Q5	2SA1462Y3Y4	TRANSISTOR	NEC
Q6	2SC3735(45)	TRANSISTOR	NEC
Q7	2SB1219(QR)	TRANSISTOR	MATSUSHITA
Q101	2SD1820(QR)	TRANSISTOR	MATSUSHITA
Q111	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q112	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q254	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q255	3SK157	F.E.T.	NEC
Q257	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q258	3SK157	F.E.T.	NEC
Q259	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q260	2SA1748(QR)	TRANSISTOR	MATSUSHITA
Q261	2SC4626(BC)	TRANSISTOR	MATSUSHITA
D1	MA142A	DIODE	MATSUSHITA
D2	MA142A	DIODE	MATSUSHITA
D3	MA142A	DIODE	MATSUSHITA
D4	MA142A	DIODE	MATSUSHITA

Symbol No.	Part No.	Part Name	Description	
D5	MA142A	DIODE	MATSUSHITA	
D6	MA742	DIODE	MATSUSHITA	
D7	MA742	DIODE	MATSUSHITA	
D8	MA742	DIODE	MATSUSHITA	
D9	MA742	DIODE	MATSUSHITA	
D10	MA742	DIODE	MATSUSHITA	
D11	MA742	DIODE	MATSUSHITA	
D12	MA142A	DIODE	MATSUSHITA	
D13	MA142A	DIODE	MATSUSHITA	
D14	MA142A	DIODE	MATSUSHITA	
D98	MA143A	DIODE	MATSUSHITA	
D99	MA143A	DIODE	MATSUSHITA	
D101	MA335	DIODE	MATSUSHITA	
D102	MA335	DIODE	MATSUSHITA	
D103	MA335	DIODE	MATSUSHITA	
D104	MA335	DIODE	MATSUSHITA	
D106	SVC341L	VARI CAP DIODE	SANYO	
R1	NRSA63J-0R0	M.G.RESISTOR	0	1/16W(E)
R2	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R3	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R4	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R5	NRVA63D-100	M.F.RESISTOR	10	1/16W
R6	NRVA63D-100	M.F.RESISTOR	10	1/16W
R7	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R8	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R9	NRVA63D-100	M.F.RESISTOR	10	1/16W
R10	NRVA63D-100	M.F.RESISTOR	10	1/16W
R11	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R12	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R13	NRVA63D-100	M.F.RESISTOR	10	1/16W
R14	NRVA63D-100	M.F.RESISTOR	10	1/16W
R15	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R16	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R19	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R31	NRVA63D-151	M.F.RESISTOR	150	1/16W
R32	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R33	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R34	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R36	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R41	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R42	NRVA63D-821	M.F.RESISTOR	820	1/16W
R43	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R47	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R51	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R52	NRVA63D-821	M.F.RESISTOR	820	1/16W
R53	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R61	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R62	NRVA63D-821	M.F.RESISTOR	820	1/16W
R63	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R64	NRVA63D-823	M.F.RESISTOR	82K	1/16W
R65	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R71	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R72	NRVA63D-221	M.F.RESISTOR	220	1/16W
R73	NRVA63D-331	M.F.RESISTOR	330	1/16W
R74	NRVA63D-821	M.F.RESISTOR	820	1/16W
R75	NRVA63D-220	M.F.RESISTOR	22	1/16W
R76	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W

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Symbol No.	Part No.	Part Name	Description	
R77	NRVA63D-821	M.F.RESISTOR	820	1/16W
R78	NRVA63D-220	M.F.RESISTOR	22	1/16W
R80	NRVA63D-471	M.F.RESISTOR	470	1/16W
R101	NRSA63J-0R0	M.G.RESISTOR	0	1/16W(U)
R102	NRSA63J-0R0	M.G.RESISTOR	0	1/16W(U)
R103	NRSA63J-0R0	M.G.RESISTOR	0	1/16W(E)
R105	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R106	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R107	NRVA63D-470	M.F.RESISTOR	47	1/16W
R108	NRVA63D-272	M:F.RESISTOR	2.7K	1/16W
R111	NRVA63D-221	M.F.RESISTOR	220	1/16W
R112	NRVA63D-103	M.F.RESISTOR	10K	1/16W(U)
	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W(E)
R113	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R114	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R115	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R116	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R117	NRVA63D-271	M.F.RESISTOR	270	1/16W
R118	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R121	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R122	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R123	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R124	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R125	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R126	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R127	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R128	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R129	NRVA63D-221	M.F.RESISTOR	220	1/16W
R141	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R142	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R143	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R144	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R151	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W(U)
	NRVA63D-393	M.F.RESISTOR	39K	1/16W(E)
R152	NRVA63D-184	M.F.RESISTOR	180K	1/16W(E)
R153	NRVA63D-912	M.F.RESISTOR	9.1K	1/16W(U)
	NRVA63D-103	M.F.RESISTOR	10K	1/16W(E)
R154	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R155	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R156	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R157	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W(U)
	NRVA63D-393	M.F.RESISTOR	39K	1/16W(E)
R158	NRVA63D-184	M.F.RESISTOR	180K	1/16W(E)
R159	NRVA63D-912	M.F.RESISTOR	9.1K	1/16W(U)
	NRVA63D-103	M.F.RESISTOR	10K	1/16W(E)
R160	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R161	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R162	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R163	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W(U)
	NRVA63D-393	M.F.RESISTOR	39K	1/16W(E)
R164	NRVA63D-184	M.F.RESISTOR	180K	1/16W(E)
R165	NRVA63D-912	M.F.RESISTOR	9.1K	1/16W(U)
	NRVA63D-103	M.F.RESISTOR	10K	1/16W(E)
R166	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R167	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R168	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R169	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R170	NRVA63D-273	M.F.RESISTOR	27K	1/16W(U)
	NRVA63D-133	M.F.RESISTOR	13K	1/16W(E)
R171	NRVA63D-124	M.F.RESISTOR	120K	1/16W

Symbol No.	Part No.	Part Name	Description	
R172	NRVA63D-273	M.F.RESISTOR	27K	1/16W(U)
	NRVA63D-133	M.F.RESISTOR	13K	1/16W(E)
R173	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R174	NRVA63D-273	M.F.RESISTOR	27K	1/16W(U)
	NRVA63D-133	M.F.RESISTOR	13K	1/16W(E)
R181	NRVA63D-821	M.F.RESISTOR	820	1/16W
R182	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R183	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R184	NRVA63D-821	M.F.RESISTOR	820	1/16W
R185	NRVA63D-821	M.F.RESISTOR	820	1/16W
R203	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R204	NRVA63D-331	M.F.RESISTOR	330	1/16W
R205	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R206	NRSA63J-684	M.G.RESISTOR	680K	1/16W
R207	NRVA63D-331	M.F.RESISTOR	330	1/16W
R208	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R209	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R210	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R211	NRVA63D-221	M.F.RESISTOR	220	1/16W
R212	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R213	NRVA63D-101	M.F.RESISTOR	100	1/16W
R215	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R216	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R217	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R218	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R219	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R220	NRVA63D-563	M.F.RESISTOR	56K	1/16W
R221	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R222	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R223	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R251	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W(U)
R252	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W(E)
R253	NRVA63D-221	M.F.RESISTOR	220	1/16W
R254	NRVA63D-100	M.F.RESISTOR	10	1/16W
R255	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R256	NRVA63D-470	M.F.RESISTOR	47	1/16W
R259	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R264	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R265	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R266	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R267	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R271	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R272	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R273	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R274	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R275	NRVA63D-182	M.F.RESISTOR	1.8K	1/16W
R276	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R277	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R278	NRVA63D-182	M.F.RESISTOR	1.8K	1/16W
R279	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R280	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R281	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R282	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R283	NRVA63D-182	M.F.RESISTOR	1.8K	1/16W
R284	NRVA63D-220	M.F.RESISTOR	22	1/16W
C1	NCT06CH-221	CER.CAPACITOR	220P	50V
C2	NEE51AM-476	TAN.CAPACITOR	47	10V
C3	NEHB1AM-477	E.CAPACITOR	470	10V

Symbol No.	Part No.	Part Name	Description	
C5	NCB31CK-473	CER.CAPACITOR	0.047	16V
C6	NCB31CK-473	CER.CAPACITOR	0.047	16V
C8	NCT06CH-151	CER.CAPACITOR	150P	50V
C9	NCB31CK-473	CER.CAPACITOR	0.047	16V
C10	NCT06CH-221	CER.CAPACITOR	220P	50V
C11	NCB31CK-473	CER.CAPACITOR	0.047	16V
C12	NCB31CK-473	CER.CAPACITOR	0.047	16V
C13	NCT06CH-5R0	CER.CAPACITOR	5.0P	50V
C14	NCT06CH-5R0	CER.CAPACITOR	5.0P	50V
C15	NCB31CK-473	CER.CAPACITOR	0.047	16V
C16	NCB31CK-473	CER.CAPACITOR	0.047	16V
C17	NCT06CH-5R0	CER.CAPACITOR	5.0P	50V
C18	NCT06CH-5R0	CER.CAPACITOR	5.0P	50V
C19	NCB31CK-473	CER.CAPACITOR	0.047	16V
C20	NCB31CK-473	CER.CAPACITOR	0.047	16V
C21	NCT06CH-5R0	CER.CAPACITOR	5.0P	50V
C22	NCT06CH-5R0	CER.CAPACITOR	5.0P	50V
C23	NEE51CM-475	TAN.CAPACITOR	4.7	16V
C25	NEE51CM-156	TAN.CAPACITOR	15	16V
C31	NEE51VM-155	TAN.CAPACITOR	1.5	35V
C32	NEE51VM-155	TAN.CAPACITOR	1.5	35V
C33	NCB21EK-473	CER.CAPACITOR	0.047	25V
C34	NCB21EK-473	CER.CAPACITOR	0.047	25V
C35	NEE51DM-106	TAN.CAPACITOR	10	20V
C36	NEE51CM-336	TAN.CAPACITOR	33	16V
C38	NEE51CM-336	TAN.CAPACITOR	33	16V
C39	NEE51CM-156	TAN.CAPACITOR	15	16V
C40	NEE51CM-475	TAN.CAPACITOR	4.7	16V
C41	NEE51VM-474	TAN.CAPACITOR	0.47	35V
C42	NEE51EM-106	TAN.CAPACITOR	10	25V
C43	NEE51CM-156	TAN.CAPACITOR	15	16V
C44	NCB31CK-473	CER.CAPACITOR	0.047	16V
C45	NCB21EK-473	CER.CAPACITOR	0.047	25V
C46	NCB31CK-473	CER.CAPACITOR	0.047	16V
C47	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C49	NCB31CK-473	CER.CAPACITOR	0.047	16V
C51	NEE51VM-474	TAN.CAPACITOR	0.47	35V
C52	NEE51EM-106	TAN.CAPACITOR	10	25V
C53	NEE51CM-225	TAN.CAPACITOR	2.2	16V
C54	NCB31CK-473	CER.CAPACITOR	0.047	16V
C55	NCB21EK-473	CER.CAPACITOR	0.047	25V
C56	NCB31CK-473	CER.CAPACITOR	0.047	16V
C57	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C61	NEE51VM-474	TAN.CAPACITOR	0.47	35V
C62	NEE51EM-106	TAN.CAPACITOR	10	25V
C63	NEE51CM-156	TAN.CAPACITOR	15	16V
C64	NCB31CK-473	CER.CAPACITOR	0.047	16V
C65	NCB21EK-473	CER.CAPACITOR	0.047	25V
C66	NCB31CK-473	CER.CAPACITOR	0.047	16V
C67	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C68	NCB31CK-473	CER.CAPACITOR	0.047	16V
C69	NCB31CK-473	CER.CAPACITOR	0.047	16V
C72	NCB31CK-473	CER.CAPACITOR	0.047	16V
C73	NCT06CH-100	CER.CAPACITOR	10P	50V
C74	NCT06CH-100	CER.CAPACITOR	10P	50V
C75	NCT06CH-100	CER.CAPACITOR	10P	50V
C76	NCT06CH-100	CER.CAPACITOR	10P	50V
C77	NCT06CH-100	CER.CAPACITOR	10P	50V
C78	NCB31CK-473	CER.CAPACITOR	0.047	16V

Symbol No.	Part No.	Part Name	Description	
C79	NCB31CK-473	CER.CAPACITOR	0.047	16V
C101	NCB31CK-473	CER.CAPACITOR	0.047	16V
C102	NCB31CK-473	CER.CAPACITOR	0.047	16V
C103	NCB31CK-473	CER.CAPACITOR	0.047	16V
C104	NCB31CK-473	CER.CAPACITOR	0.047	16V
C105	NEHA0JM-686	E.CAPACITOR	68	6.3V
C106	NEHA0JM-686	E.CAPACITOR	68	6.3V
C107	NEE51CM-475	TAN.CAPACITOR	4.7	16V
C108	NEE51CM-336	TAN.CAPACITOR	33	16V
C109	NEE51CM-475	TAN.CAPACITOR	4.7	16V
C110	NEE51CM-156	TAN.CAPACITOR	15	16V
C111	NCB31CK-473	CER.CAPACITOR	0.047	16V
C112	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C113	NCT06CH-560	CER.CAPACITOR	56P	50V
C114	NCT06CH-560	CER.CAPACITOR	56P	50V
C115	NCB31HK-103	CER.CAPACITOR	0.010	50V
C116	NCB31CK-473	CER.CAPACITOR	0.047	16V
C121	NCB31HK-103	CER.CAPACITOR	0.010	50V
C122	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C123	NCT06CH-101	CER.CAPACITOR	100P	50V
C124	NCT06CH-101	CER.CAPACITOR	100P	50V
C125	NCB31HK-103	CER.CAPACITOR	0.010	50V
C126	NCB31CK-473	CER.CAPACITOR	0.047	16V
C141	NCB31CK-473	CER.CAPACITOR	0.047	16V
C142	NCB31CK-473	CER.CAPACITOR	0.047	16V
C144	NCB31HK-152	CER.CAPACITOR	1500P	50V
C145	NCB31HK-272	CER.CAPACITOR	2700P	50V
C146	NCT06CH-331	CER.CAPACITOR	330P	50V
C149	NCB31CK-473	CER.CAPACITOR	0.047	16V
C150	NCB31CK-473	CER.CAPACITOR	0.047	16V
C151	NCB31CK-473	CER.CAPACITOR	0.047	16V
C152	NCB31CK-473	CER.CAPACITOR	0.047	16V
C153	NCB31CK-473	CER.CAPACITOR	0.047	16V
C154	NCB31CK-473	CER.CAPACITOR	0.047	16V
C155	NCB31CK-473	CER.CAPACITOR	0.047	16V
C156	NCT06CH-101	CER.CAPACITOR	100P	50V
C157	NCT06CH-101	CER.CAPACITOR	100P	50V
C158	NCT06CH-101	CER.CAPACITOR	100P	50V
C202	NCT06CH-151	CER.CAPACITOR	150P	50V (U)
	NCT06CH-101	CER.CAPACITOR	100P	50V (E)
C203	NCT06CH-220	CER.CAPACITOR	22P	50V (U)
C204	NCB31CK-473	CER.CAPACITOR	0.047	16V
C205	NCB31CK-473	CER.CAPACITOR	0.047	16V
C206	NCB31HK-103	CER.CAPACITOR	0.010	50V
C207	NCB31CK-473	CER.CAPACITOR	0.047	16V
C208	NCB31CK-473	CER.CAPACITOR	0.047	16V
C209	NCB31CK-473	CER.CAPACITOR	0.047	16V
C210	NCB31CK-473	CER.CAPACITOR	0.047	16V
C211	NCB31CK-473	CER.CAPACITOR	0.047	16V
C212	NCT06CH-560	CER.CAPACITOR	56P	50V
C213	NCB31CK-473	CER.CAPACITOR	0.047	16V
C214	NCB31CK-473	CER.CAPACITOR	0.047	16V
C215	NCB31CK-473	CER.CAPACITOR	0.047	16V
C216	NCB31CK-473	CER.CAPACITOR	0.047	16V
C217	NCB31CK-473	CER.CAPACITOR	0.047	16V
C218	NCB31CK-473	CER.CAPACITOR	0.047	16V
C219	NCB31CK-473	CER.CAPACITOR	0.047	16V
C220	NEE51AM-476	TAN.CAPACITOR	47	10V
C221	NEE51AM-476	TAN.CAPACITOR	47	10V

[ST]

Symbol No.	Part No.	Part Name	Description	
C230	QFN31HJ-472	F.CAPACITOR	0.0047	
C236	NCB31CK-473	CER.CAPACITOR	0.047	16V
C241	NCB31CK-473	CER.CAPACITOR	0.047	16V
C253	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C254	NCT03CH-102	CER.CAPACITOR	1000P	50V
C255	NCB31CK-473	CER.CAPACITOR	0.047	16V
C256	NEE50GM-476	TAN.CAPACITOR	47	4V
C258	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C260	NCB31CK-473	CER.CAPACITOR	0.047	16V
C261	NEE50GM-476	TAN.CAPACITOR	47	4V
C265	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C266	NCB31CK-473	CER.CAPACITOR	0.047	16V
C267	NEE50GM-476	TAN.CAPACITOR	47	4V
C268	NCB31CK-473	CER.CAPACITOR	0.047	16V
C269	NCB31CK-473	CER.CAPACITOR	0.047	16V
C270	NCB31CK-473	CER.CAPACITOR	0.047	16V
C271	NCB31CK-473	CER.CAPACITOR	0.047	16V
C272	NEE51AM-476	TAN.CAPACITOR	47	10V
C273	NEHA0JM-686	E.CAPACITOR	68	6.3V
C274	NEHA0JM-686	E.CAPACITOR	68	6.3V
C351	NCB31CK-473	CER.CAPACITOR	0.047	16V
C352	NCB31CK-473	CER.CAPACITOR	0.047	16V
C353	NCB31CK-473	CER.CAPACITOR	0.047	16V
C354	NCB31CK-473	CER.CAPACITOR	0.047	16V
C355	NCB31CK-473	CER.CAPACITOR	0.047	16V
C356.	NCB31CK-473	CER.CAPACITOR	0.047	16V
C357	NCB31CK-473	CER.CAPACITOR	0.047	16V
C358	NCB31CK-473	CER.CAPACITOR	0.047	16V
C359	NCB31CK-473	CER.CAPACITOR	0.047	16V
L103	SSV2623-120	PEAKING COIL	12μH	
L251	SCV2662-027	FERRITE BEADS		
LC1	SCV1804-222	EMI FILTER		
LC2	SCV1804-222	EMI FILTER		
LC101	SCV1804-222	EMI FILTER		
LC102	SCV1804-222	EMI FILTER		
LC103	SCV1804-222	EMI FILTER		
LC104	SCV1804-222	EMI FILTER		
LC111	SCV2597-S144Z	EMI FILTER		
LC251	SCV2528-001Z	EMI FILTER		(U)
X1	CE41081-A0A	CRYSTAL	28.636 MHz	(U)
	CE41212-001	CRYSTAL	28.375 MHz	(E)
X2	SCV2219-001	CRYSTAL	14.31818 MHz	(U)
	CE42275-001	CRYSTAL	17.734475 MHz	(E)
CN1	SSV2614-24	CONNECTOR	24PIN	
CN2	SSV2614-24	CONNECTOR	24PIN	
CN13	SSV2614-20	FFC CONNECTOR	20PIN	
CN14	SSV2614-20	FFC CONNECTOR	20PIN	
CN15	SSV2614-20	FFC CONNECTOR	20PIN	
TP101	SCV1880-001	TEST POINT	VD	
TP102	SCV1880-001	TEST POINT	HD	
TP103	SCV1880-001	TEST POINT	SC	
TP104	SCV1880-001	TEST POINT	Eoh	

5.2 ISB BOARD ASSEMBLY LIST [0][2]

SCK2450-02-00A [0][2][ ][ ][ ][ ][ ][ ]

Symbol No.	Part No.	Part Name	Description	
SK1	SCV1217-010	I.C.SOCKET	for IC1	
IC2	CXA1439M	I.C.(M)	SONY	
IC3	TC74VHC04FS	I.C.(M)	TOSHIBA	
IC5	CLC425AJE-T2	I.C.(M)	COMLINEAR	
Q1	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
R1	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R2	NRVA63D-391	M.F.RESISTOR	390	1/16W
R3	NRVA63D-184	M.F.RESISTOR	180K	1/16W
R4	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R5	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W
R7	NRVA63D-101	M.F.RESISTOR	100	1/16W
R8	NRVA63D-561	M.F.RESISTOR	560	1/16W
R9	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R10	NRVA63D-391	M.F.RESISTOR	390	1/16W
R11	NRVA63D-180	M.F.RESISTOR	18	1/16W
R12	NRVA63D-180	M.F.RESISTOR	18	1/16W
R13	NRVA63D-180	M.F.RESISTOR	18	1/16W
R14	NRVA63D-180	M.F.RESISTOR	18	1/16W
R16	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R17	NRVA63D-220	M.F.RESISTOR	22	1/16W
R18	NRVA63D-561	M.F.RESISTOR	560	1/16W
C1	NEF11VM-335	TAN.CAPACITOR	3.3	35V
C2	NCB21EK-473	CER.CAPACITOR	0.047	25V
C3	NCB21EK-473	CER.CAPACITOR	0.047	25V
C4	NEE50GM-476	TAN.CAPACITOR	47	4V
C5	NEF11AM-225	TAN.CAPACITOR	2.2	10V
C6	NCB21EK-473	CER.CAPACITOR	0.047	25V
C7	NCB21EK-473	CER.CAPACITOR	0.047	25V
C8	NCB21EK-473	CER.CAPACITOR	0.047	25V
C11	NCB21EK-473	CER.CAPACITOR	0.047	25V
C12	NCB21EK-473	CER.CAPACITOR	0.047	25V
C13	NCB21EK-473	CER.CAPACITOR	0.047	25V
C15	NCB21EK-473	CER.CAPACITOR	0.047	25V
C16	NCB21EK-473	CER.CAPACITOR	0.047	25V
C17	NCB21EK-473	CER.CAPACITOR	0.047	25V
C18	NCB21EK-473	CER.CAPACITOR	0.047	25V
C19	NCB21EK-473	CER.CAPACITOR	0.047	25V
C20	NCB21EK-473	CER.CAPACITOR	0.047	25V
C21	NCB21EK-473	CER.CAPACITOR	0.047	25V
LC1	SCV1804-222	EMI FILTER		
LC2	SCV1804-222	EMI FILTER		
LC3	SCV1804-222	EMI FILTER		
LC4	SCV1804-222	EMI FILTER		
LC5	SCV1804-222	EMI FILTER		
LC6	SCV1804-222	EMI FILTER		
CN13	SSV2614-20	CONNECTOR	20PIN	
CN23	SCV1770-004	CONNECTOR	4PIN	
TP1	SCV1880-001	TEST POINT		

5.3 ISG BOARD ASSEMBLY LIST [03]

SCK2450-03-00A [03]□□□□□□

Symbol No.	Part No.	Part Name	Description	
SK1	SCV1217-010	I.C.SOCKET	for IC1	
IC2	CXA1439M	I.C.(M)	SONY	
IC3	TC74VHC04FS	I.C.(M)	TOSHIBA	
IC5	CLC425AJE-T2	I.C.(M)	COMLINEAR	
Q1	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q2	3SK157	F.E.T.	NEC	
R1	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R2	NRVA63D-391	M.F.RESISTOR	390	1/16W
R3	NRVA63D-184	M.F.RESISTOR	180K	1/16W
R4	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R5	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W
R6	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R8	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R9	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R10	NRVA63D-911	M.F.RESISTOR	910	1/16W
R11	NRVA63D-180	M.F.RESISTOR	18	1/16W
R12	NRVA63D-180	M.F.RESISTOR	18	1/16W
R13	NRVA63D-180	M.F.RESISTOR	18	1/16W
R14	NRVA63D-180	M.F.RESISTOR	18	1/16W
R16	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R17	NRVA63D-220	M.F.RESISTOR	22	1/16W
R18	NRVA63D-561	M.F.RESISTOR	560	1/16W
C1	NEF11VM-335	TAN.CAPACITOR	3.3	35V
C2	NCB21EK-473	CER.CAPACITOR	0.047	25V
C3	NCB21EK-473	CER.CAPACITOR	0.047	25V
C4	NEE50GM-476	TAN.CAPACITOR	47	4V
C5	NEF11AM-225	TAN.CAPACITOR	2.2	10V
C6	NCB21EK-473	CER.CAPACITOR	0.047	25V
C7	NCB21EK-473	CER.CAPACITOR	0.047	25V
C8	NCB21EK-473	CER.CAPACITOR	0.047	25V
C10	NCT06CH-330	CER.CAPACITOR	33P	50V
C11	NCB21EK-473	CER.CAPACITOR	0.047	25V
C12	NCB21EK-473	CER.CAPACITOR	0.047	25V
C13	NCB21EK-473	CER.CAPACITOR	0.047	25V
C15	NCB21EK-473	CER.CAPACITOR	0.047	25V
C16	NCB21EK-473	CER.CAPACITOR	0.047	25V
C17	NCB21EK-473	CER.CAPACITOR	0.047	25V
C18	NCB21EK-473	CER.CAPACITOR	0.047	25V
C19	NCB21EK-473	CER.CAPACITOR	0.047	25V
C20	NCB21EK-473	CER.CAPACITOR	0.047	25V
C21	NCB21EK-473	CER.CAPACITOR	0.047	25V
LC1	SCV1804-222	EMI FILTER		
LC2	SCV1804-222	EMI FILTER		
LC3	SCV1804-222	EMI FILTER		
LC4	SCV1804-222	EMI FILTER		
LC5	SCV1804-222	EMI FILTER		
LC6	SCV1804-222	EMI FILTER		
CN14	SSV2615-20	CONNECTOR	20PIN	
CN24	SCV1770-004	CONNECTOR	4PIN	

5.4 ISR BOARD ASSEMBLY LIST [04]

SCK2450-04-00A [04]□□□□□□

Symbol No.	Part No.	Part Name	Description	
SK1	SCV1217-010	I.C.SOCKET	for IC1	
IC2	CXA1439M	I.C.(M)	SONY	
IC3	TC74VHC04FS	I.C.(M)	TOSHIBA	
IC5	CLC425AJE-T2	I.C.(M)	COMLINEAR	
Q1	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
R1	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R2	NRVA63D-391	M.F.RESISTOR	390	1/16W
R3	NRVA63D-184	M.F.RESISTOR	180K	1/16W
R4	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R5	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W
R7	NRVA63D-101	M.F.RESISTOR	100	1/16W
R8	NRVA63D-751	M.F.RESISTOR	750	1/16W
R9	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R10	NRVA63D-561	M.F.RESISTOR	560	1/16W
R11	NRVA63D-180	M.F.RESISTOR	18	1/16W
R12	NRVA63D-180	M.F.RESISTOR	18	1/16W
R13	NRVA63D-180	M.F.RESISTOR	18	1/16W
R14	NRVA63D-180	M.F.RESISTOR	18	1/16W
R16	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R17	NRVA63D-220	M.F.RESISTOR	22	1/16W
R18	NRVA63D-561	M.F.RESISTOR	560	1/16W
C1	NEF11VM-335	TAN.CAPACITOR	3.3	35V
C2	NCB21EK-473	CER.CAPACITOR	0.047	25V
C3	NCB21EK-473	CER.CAPACITOR	0.047	25V
C4	NEE50GM-476	TAN.CAPACITOR	47	4V
C5	NEF11AM-225	TAN.CAPACITOR	2.2	10V
C6	NCB21EK-473	CER.CAPACITOR	0.047	25V
C7	NCB21EK-473	CER.CAPACITOR	0.047	25V
C8	NCB21EK-473	CER.CAPACITOR	0.047	25V
C11	NCB21EK-473	CER.CAPACITOR	0.047	25V
C12	NCB21EK-473	CER.CAPACITOR	0.047	25V
C13	NCB21EK-473	CER.CAPACITOR	0.047	25V
C15	NCB21EK-473	CER.CAPACITOR	0.047	25V
C16	NCB21EK-473	CER.CAPACITOR	0.047	25V
C17	NCB21EK-473	CER.CAPACITOR	0.047	25V
C18	NCB21EK-473	CER.CAPACITOR	0.047	25V
C19	NCB21EK-473	CER.CAPACITOR	0.047	25V
C20	NCB21EK-473	CER.CAPACITOR	0.047	25V
C21	NCB21EK-473	CER.CAPACITOR	0.047	25V
LC1	SCV1804-222	EMI FILTER		
LC2	SCV1804-222	EMI FILTER		
LC3	SCV1804-222	EMI FILTER		
LC4	SCV1804-222	EMI FILTER		
LC5	SCV1804-222	EMI FILTER		
LC6	SCV1804-222	EMI FILTER		
CN15	SSV2615-20	CONNECTOR	20PIN	
CN25	SCV1770-004	CONNECTOR	4PIN	
TP1	SCV1880-001	TEST POINT		

5.5 PR BOARD ASSEMBLY LIST [0][5]

SCK2443-01-00B [0][5]□□□□□□

Symbol No.	Part No.	Part Name	Description
IC2	TC7S86F	I.C.(M)	TOSHIBA
IC3	TC7S04F	I.C.(M)	TOSHIBA
IC4	MB88345PF	I.C.(M)	FUJITSU
IC5	NJM78L05UA	I.C.(M)	JRC
IC401	AD603AR	I.C.(M)	ANALOG DEVICES
IC402	LMC6082IM	I.C.(M)	NATIONAL SEMICO
IC403	TC4S66F	I.C.(M)	TOSHIBA
IC404	MC74HC4053F	I.C.(M)	MOTOROLA
IC405	CLC501AJE	I.C.(M)	COMLINEAR
IC406	MC74HC4053F	I.C.(M)	MOTOROLA
IC407	AD8011AR	I.C.(M)	ANALOG DEVICES
IC408	TC4S66F	I.C.(M)	TOSHIBA
IC409	TC4S66F	I.C.(M)	TOSHIBA
IC410	NJM062M	I.C.(M)	JRC
IC411	AD8011AR	I.C.(M)	ANALOG DEVICES
IC412	TC4S66F	I.C.(M)	TOSHIBA
IC413	NJM062M	I.C.(M)	JRC
IC501	AD603AR	I.C.(M)	ANALOG DEVICES
IC502	LMC6082IM	I.C.(M)	NATIONAL SEMICO
IC503	TC4S66F	I.C.(M)	TOSHIBA
IC505	CLC501AJE	I.C.(M)	COMLINEAR
IC506	TL441CNS	I.C.(M)	TEXAS
IC507	AD8011AR	I.C.(M)	ANALOG DEVICES
IC508	TC4S66F	I.C.(M)	TOSHIBA
IC509	TC4S66F	I.C.(M)	TOSHIBA
IC510	NJM062M	I.C.(M)	JRC
IC511	AD8011AR	I.C.(M)	ANALOG DEVICES
IC512	TC4S66F	I.C.(M)	TOSHIBA
IC513	NJM062M	I.C.(M)	JRC
IC601	AD603AR	I.C.(M)	ANALOG DEVICES
IC602	LMC6082IM	I.C.(M)	NATIONAL SEMICO
IC603	TC4S66F	I.C.(M)	TOSHIBA
IC605	CLC501AJE	I.C.(M)	COMLINEAR
IC606	TL441CNS	I.C.(M)	TEXAS
IC607	AD8011AR	I.C.(M)	ANALOG DEVICES
IC608	TC4S66F	I.C.(M)	TOSHIBA
IC609	TC4S66F	I.C.(M)	TOSHIBA
IC610	NJM062M	I.C.(M)	JRC
IC611	AD8011AR	I.C.(M)	ANALOG DEVICES
IC612	TC4S66F	I.C.(M)	TOSHIBA
IC613	NJM062M	I.C.(M)	JRC
Q1	DTA124EU	TRANSISTOR	ROHM
Q401	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q402	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q403	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q501	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q502	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q503	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q601	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q602	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q603	2SC4626(BC)	TRANSISTOR	MATSUSHITA
D401	MA142WK	DIODE	MATSUSHITA
D402	MA742	DIODE	MATSUSHITA
D501	MA142WK	DIODE	MATSUSHITA
D502	MA742	DIODE	MATSUSHITA
D601	MA142WK	DIODE	MATSUSHITA
D602	MA742	DIODE	MATSUSHITA

Symbol No.	Part No.	Part Name	Description	
R1	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R2	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R3	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R4	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R5	NRVA63D-274	M.F.RESISTOR	270K	1/16W
R6	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R7	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R8	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R9	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R10	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R11	NRVA63D-274	M.F.RESISTOR	270K	1/16W
R12	NRVA63D-112	M.F.RESISTOR	1.1K	1/16W
R13	NRVA63D-181	M.F.RESISTOR	180	1/16W
R14	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R21	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R23	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R401	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R402	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R403	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R404	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R405	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R406	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R407	NRSA63J-2R2	M.G.RESISTOR	2.2	1/16W
R408	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R410	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R411	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R412	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R413	NRVA63D-184	M.F.RESISTOR	180K	1/16W
R414	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R415	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R416	NRVA63D-471	M.F.RESISTOR	470	1/16W
R417	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R418	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R419	NRVA63D-821	M.F.RESISTOR	820	1/16W
R420	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R421	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R422	NRVA63D-821	M.F.RESISTOR	820	1/16W
R423	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R424	NRVA63D-561	M.F.RESISTOR	560	1/16W
R425	NRVA63D-471	M.F.RESISTOR	470	1/16W
R426	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R427	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R428	NRVA63D-101	M.F.RESISTOR	100	1/16W
R429	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R430	NRVA63D-561	M.F.RESISTOR	560	1/16W
R431	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R432	NRVA63D-561	M.F.RESISTOR	560	1/16W
R433	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R434	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R435	NRVA63D-821	M.F.RESISTOR	820	1/16W
R436	NRVA63D-182	M.F.RESISTOR	1.8K	1/16W
R437	NRVA63D-100	M.F.RESISTOR	10	1/16W
R438	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R439	NRVA63D-363	M.F.RESISTOR	36K	1/16W
R440	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R441	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R442	NRVA63D-821	M.F.RESISTOR	820	1/16W
R443	NRVA63D-821	M.F.RESISTOR	820	1/16W
R444	NRVA63D-563	M.F.RESISTOR	56K	1/16W
R445	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W

Symbol No.	Part No.	Part Name	Description	
R446	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R447	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W
R448	NRVA63D-243	M.F.RESISTOR	24K	1/16W
R449	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R450	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R451	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R452	NRVA63D-221	M.F.RESISTOR	220	1/16W
R453	NRVA63D-154	M.F.RESISTOR	150K	1/16W
R454	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R456	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R457	NRVA63D-224	M.F.RESISTOR	220K	1/16W
R458	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R461	NRVA63D-274	M.F.RESISTOR	270K	1/16W
R462	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R501	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R502	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R503	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R504	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R505	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R506	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R507	NRSA63J-2R2	M.G.RESISTOR	2.2	1/16W
R508	NRVA63D-331	M.F.RESISTOR	330	1/16W
R510	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R511	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R512	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R513	NRVA63D-184	M.F.RESISTOR	180K	1/16W
R514	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R515	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R516	NRVA63D-471	M.F.RESISTOR	470	1/16W
R517	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R518	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R519	NRVA63D-681	M.F.RESISTOR	680	1/16W
R520	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R521	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R522	NRVA63D-821	M.F.RESISTOR	820	1/16W
R523	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R524	NRVA63D-561	M.F.RESISTOR	560	1/16W
R525	NRVA63D-471	M.F.RESISTOR	470	1/16W
R526	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R527	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R528	NRVA63D-101	M.F.RESISTOR	100	1/16W
R529	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R530	NRVA63D-561	M.F.RESISTOR	560	1/16W
R531	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R532	NRVA63D-561	M.F.RESISTOR	560	1/16W
R533	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R534	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R535	NRVA63D-821	M.F.RESISTOR	820	1/16W
R536	NRVA63D-182	M.F.RESISTOR	1.8K	1/16W
R537	NRVA63D-100	M.F.RESISTOR	10	1/16W
R538	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R539	NRVA63D-363	M.F.RESISTOR	36K	1/16W
R540	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R541	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R542	NRVA63D-821	M.F.RESISTOR	820	1/16W
R543	NRVA63D-821	M.F.RESISTOR	820	1/16W
R544	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R545	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R546	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R547	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W

Symbol No.	Part No.	Part Name	Description	
R548	NRVA63D-393	M.F.RESISTOR	39K	1/16W
R549	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R550	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R551	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R552	NRVA63D-221	M.F.RESISTOR	220	1/16W
R553	NRVA63D-154	M.F.RESISTOR	150K	1/16W
R554	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R555	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R556	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R557	NRVA63D-224	M.F.RESISTOR	220K	1/16W
R558	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R561	NRVA63D-274	M.F.RESISTOR	270K	1/16W
R562	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R601	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R602	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R603	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R604	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R605	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R606	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R607	NRSA63J-2R2	M.G.RESISTOR	2.2	1/16W
R608	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R610	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R611	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R612	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R613	NRVA63D-184	M.F.RESISTOR	180K	1/16W
R614	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R615	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R616	NRVA63D-471	M.F.RESISTOR	470	1/16W
R617	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R618	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R619	NRVA63D-821	M.F.RESISTOR	820	1/16W
R620	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R621	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R622	NRVA63D-821	M.F.RESISTOR	820	1/16W
R623	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R624	NRVA63D-561	M.F.RESISTOR	560	1/16W
R625	NRVA63D-471	M.F.RESISTOR	470	1/16W
R626	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R627	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R628	NRVA63D-101	M.F.RESISTOR	100	1/16W
R629	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R630	NRVA63D-561	M.F.RESISTOR	560	1/16W
R631	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R632	NRVA63D-561	M.F.RESISTOR	560	1/16W
R633	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R634	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R635	NRVA63D-821	M.F.RESISTOR	820	1/16W
R636	NRVA63D-182	M.F.RESISTOR	1.8K	1/16W
R637	NRVA63D-100	M.F.RESISTOR	10	1/16W
R638	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R639	NRVA63D-363	M.F.RESISTOR	36K	1/16W
R640	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R641	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R642	NRVA63D-821	M.F.RESISTOR	820	1/16W
R643	NRVA63D-821	M.F.RESISTOR	820	1/16W
R644	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R645	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R646	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R647	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W
R648	NRVA63D-183	M.F.RESISTOR	18K	1/16W

[PR]

Symbol No.	Part No.	Part Name	Description	
R649	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R650	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R651	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R652	NRVA63D-221	M.F.RESISTOR	220	1/16W
R653	NRVA63D-154	M.F.RESISTOR	150K	1/16W
R654	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R656	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R657	NRVA63D-224	M.F.RESISTOR	220K	1/16W
R658	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R661	NRVA63D-274	M.F.RESISTOR	270K	1/16W
R662	NRVA63D-104	M.F.RESISTOR	100K	1/16W
C1	NEE51AM-476	TAN.CAPACITOR	47	10V
C2	NEE51AM-476	TAN.CAPACITOR	47	10V
C3	NCB31CK-473	CER.CAPACITOR	0.047	16V
C4	NCB31CK-473	CER.CAPACITOR	0.047	16V
C5	NCB31CK-473	CER.CAPACITOR	0.047	16V
C6	NEE51AM-106	TAN.CAPACITOR	10	10V
C7	NCB31CK-473	CER.CAPACITOR	0.047	16V
C9	NCB31CK-473	CER.CAPACITOR	0.047	16V
C11	NEE51AM-476	TAN.CAPACITOR	47	10V
C12	NEE51CM-225	TAN.CAPACITOR	2.2	16V
C17	NCB31CK-473	CER.CAPACITOR	0.047	16V
C401	NCB31CK-473	CER.CAPACITOR	0.047	16V
C402	NCB31CK-473	CER.CAPACITOR	0.047	16V
C403	NCB31CK-473	CER.CAPACITOR	0.047	16V
C404	NCB31CK-473	CER.CAPACITOR	0.047	16V
C405	NCB21HK-103	CER.CAPACITOR	0.010	50V
C406	NCB31CK-473	CER.CAPACITOR	0.047	16V
C407	NCB31CK-473	CER.CAPACITOR	0.047	16V
C410	NCB31CK-473	CER.CAPACITOR	0.047	16V
C411	NCB31CK-473	CER.CAPACITOR	0.047	16V
C413	NCB31CK-473	CER.CAPACITOR	0.047	16V
C414	NCB31CK-473	CER.CAPACITOR	0.047	16V
C415	NCB31CK-473	CER.CAPACITOR	0.047	16V
C417	NCB31CK-473	CER.CAPACITOR	0.047	16V
C419	NCB31CK-473	CER.CAPACITOR	0.047	16V
C420	NCB31CK-473	CER.CAPACITOR	0.047	16V
C421	NCB31CK-473	CER.CAPACITOR	0.047	16V
C424	NCB31CK-473	CER.CAPACITOR	0.047	16V
C425	NCT06CH-7R0	CER.CAPACITOR	7.0P	50V
C426	NCT06CH-331	CER.CAPACITOR	330P	50V
C501	NCB31CK-473	CER.CAPACITOR	0.047	16V
C502	NCB31CK-473	CER.CAPACITOR	0.047	16V
C503	NCB31CK-473	CER.CAPACITOR	0.047	16V
C504	NCB31CK-473	CER.CAPACITOR	0.047	16V
C505	NCB21HK-103	CER.CAPACITOR	0.010	50V
C506	NCB31CK-473	CER.CAPACITOR	0.047	16V
C507	NCB31CK-473	CER.CAPACITOR	0.047	16V
C510	NCB31CK-473	CER.CAPACITOR	0.047	16V
C511	NCB31CK-473	CER.CAPACITOR	0.047	16V
C513	NCB31CK-473	CER.CAPACITOR	0.047	16V
C514	NCB31CK-473	CER.CAPACITOR	0.047	16V
C515	NCB31CK-473	CER.CAPACITOR	0.047	16V
C517	NCB31CK-473	CER.CAPACITOR	0.047	16V
C518	NCB31CK-473	CER.CAPACITOR	0.047	16V
C519	NCB31CK-473	CER.CAPACITOR	0.047	16V
C520	NCB31CK-473	CER.CAPACITOR	0.047	16V
C521	NCB31CK-473	CER.CAPACITOR	0.047	16V

Symbol No.	Part No.	Part Name	Description	
C522	NCB31CK-473	CER.CAPACITOR	0.047	16V
C523	NCB31CK-473	CER.CAPACITOR	0.047	16V
C524	NCB31CK-473	CER.CAPACITOR	0.047	16V
C525	NCT06CH-7R0	CER.CAPACITOR	7.0P	50V
C526	NCT06CH-331	CER.CAPACITOR	330P	50V
C601	NCB31CK-473	CER.CAPACITOR	0.047	16V
C602	NCB31CK-473	CER.CAPACITOR	0.047	16V
C603	NCB31CK-473	CER.CAPACITOR	0.047	16V
C604	NCB31CK-473	CER.CAPACITOR	0.047	16V
C605	NCB21HK-103	CER.CAPACITOR	0.010	50V
C606	NCB31CK-473	CER.CAPACITOR	0.047	16V
C607	NCB31CK-473	CER.CAPACITOR	0.047	16V
C610	NCB31CK-473	CER.CAPACITOR	0.047	16V
C611	NCB31CK-473	CER.CAPACITOR	0.047	16V
C613	NCB31CK-473	CER.CAPACITOR	0.047	16V
C614	NCB31CK-473	CER.CAPACITOR	0.047	16V
C615	NCB31CK-473	CER.CAPACITOR	0.047	16V
C617	NCB31CK-473	CER.CAPACITOR	0.047	16V
C618	NCB31CK-473	CER.CAPACITOR	0.047	16V
C619	NCB31CK-473	CER.CAPACITOR	0.047	16V
C620	NCB31CK-473	CER.CAPACITOR	0.047	16V
C621	NCB31CK-473	CER.CAPACITOR	0.047	16V
C622	NCB31CK-473	CER.CAPACITOR	0.047	16V
C623	NCB31CK-473	CER.CAPACITOR	0.047	16V
C624	NCB31CK-473	CER.CAPACITOR	0.047	16V
C625	NCT06CH-7R0	CER.CAPACITOR	7.0P	50V
C626	NCT06CH-331	CER.CAPACITOR	330P	50V
L1	SCV2662-027	FERRITE BEADS		
L2	SCV2662-027	FERRITE BEADS		
L401	SCV2662-027	FERRITE BEADS		
L402	SCV2662-027	FERRITE BEADS		
L403	SCV2662-027	FERRITE BEADS		
L404	SCV2662-027	FERRITE BEADS		
L405	SCV1950-3R9	PEAKING COIL	3.9μH	
L501	SCV2662-027	FERRITE BEADS		
L502	SCV2662-027	FERRITE BEADS		
L503	SCV2662-027	FERRITE BEADS		
L504	SCV2662-027	FERRITE BEADS		
L505	SCV1950-3R9	PEAKING COIL	3.9μH	
L601	SCV2662-027	FERRITE BEADS		
L602	SCV2662-027	FERRITE BEADS		
L603	SCV2662-027	FERRITE BEADS		
L604	SCV2662-027	FERRITE BEADS		
L605	SCV1950-3R9	PEAKING COIL	3.9μH	
DL401	SCV2635-001	L.P.F.	14.3 MHz TRAP	
DL501	SCV2635-001	L.P.F.	14.3 MHz TRAP	
DL601	SCV2635-001	L.P.F.	14.3 MHz TRAP	
CN3	CHB102W-24R	CONNECTOR	24PIN	
CN4	CHB102W-14R	CONNECTOR	14PIN	
CN23	SCV1770-004	CONNECTOR	4PIN	
CN24	SCV1770-004	CONNECTOR	4PIN	
CN25	SCV1770-004	CONNECTOR	4PIN	
TP401	SCV1880-001	TEST POINT	LP B	

5.6 CE BOARD ASSEMBLY LIST [0][6]

SCK2443-02-N0B (U)

SCK2443-02-P0B (E) [0][6]□□□□□□□

Symbol No.	Part No.	Part Name	Description
TP402	SCV1880-001	TEST POINT	GAMMA IN B
TP403	SCV1880-001	TEST POINT	GAMMA OUT B
TP501	SCV1880-001	TEST POINT	LP G
TP502	SCV1880-001	TEST POINT	GAMMA IN G
TP503	SCV1880-001	TEST POINT	GAMMA OUT G
TP601	SCV1880-001	TEST POINT	LP R
TP602	SCV1880-001	TEST POINT	GAMMA IN R
TP603	SCV1880-001	TEST POINT	GAMMA OUT R

Symbol No.	Part No.	Part Name	Description
IC1	TC7S04F	I.C.(M)	TOSHIBA
IC2	TC7S04F	I.C.(M)	TOSHIBA
IC401	AD8011AR	I.C.(M)	ANALOG DEVICES
IC402	MC74HC4053F	I.C.(M)	MOTOROLA
IC501	AD8011AR	I.C.(M)	ANALOG DEVICES
IC502	TK16031MTL	I.C.(M)	TOKO DENSI
IC503	AD8011AR	I.C.(M)	ANALOG DEVICES
IC504	LMC6082IM	I.C.(M)	NATIONAL SEMICO
IC505	TC4S66F	I.C.(M)	TOSHIBA
IC506	TC4S66F	I.C.(M)	TOSHIBA
IC601	AD8011AR	I.C.(M)	ANALOG DEVICES
IC701	LMC6082IM	I.C.(M)	NATIONAL SEMICO
IC702	TC4S66F	I.C.(M)	TOSHIBA
IC703	AD8011AR	I.C.(M)	ANALOG DEVICES
IC704	TC4S66F	I.C.(M)	TOSHIBA
IC705	LMC6082IM	I.C.(M)	NATIONAL SEMICO
IC706	TC4S66F	I.C.(M)	TOSHIBA
IC801	AD8011AR	I.C.(M)	ANALOG DEVICES
IC802	AD8011AR	I.C.(M)	ANALOG DEVICES
IC803	NJM5532M	I.C.(M)	JRC
IC804	AD8011AR	I.C.(M)	ANALOG DEVICES
IC805	MLT04GS	I.C.(M)	ANALOG DEVICES
IC806	AD8011AR	I.C.(M)	ANALOG DEVICES
IC807	MC14052BF	I.C.(M)	MOTOROLA
IC808	MC14052BF	I.C.(M)	MOTOROLA
IC809	AD8002AR	I.C.(M)	ANALOG DEVICES
IC810	AD8002AR	I.C.(M)	ANALOG DEVICES
Q1	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q2	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q3	3SK157	F.E.T.	NEC
Q4	3SK157	F.E.T.	NEC
Q5	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q6	DTC124EU	TRANSISTOR	ROHM
Q401	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q402	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q403	3SK157	F.E.T.	NEC
Q404	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q405	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q406	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q407	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q501	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q502	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q503	3SK157	F.E.T.	NEC
Q504	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q505	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q506	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q507	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q508	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q510	2SJ163(Q,R)	F.E.T.	MATSUSHITA
Q601	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q602	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q603	3SK157	F.E.T.	NEC
Q604	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q605	2SA1790(BC)	TRANSISTOR	MATSUSHITA
Q606	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q607	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q702	2SC4626(BC)	TRANSISTOR	MATSUSHITA
Q703	2SC4626(BC)	TRANSISTOR	MATSUSHITA

[CE]

Symbol No.	Part No.	Part Name	Description	
Q704	2SJ163(Q.R)	F.E.T.	MATSUSHITA	
Q705	2SK374(Q.R)	F.E.T.	MATSUSHITA	
Q706	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q707	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q708	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q709	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q710	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q711	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q712	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q713	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q714	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q715	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q716	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q717	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q718	2SK374(Q.R)	F.E.T.	MATSUSHITA	
Q720	2SJ163(Q.R)	F.E.T.	MATSUSHITA	
Q721	2SJ163(Q.R)	F.E.T.	MATSUSHITA	
Q722	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q723	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q801	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q802	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
D1	MA143A	DIODE	MATSUSHITA	
D701	MA143A	DIODE	MATSUSHITA	
D702	MA742	DIODE	MATSUSHITA	
R1	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R2	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R3	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R4	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R5	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R6	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R7	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R8	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R9	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R10	NRVA63D-153	M.F.RESISTOR	15K	1/16W
R11	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R12	NRVA63D-153	M.F.RESISTOR	15K	1/16W
R13	NRVA63D-821	M.F.RESISTOR	820	1/16W
R14	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R15	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R16	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R17	NRVA63D-273	M.F.RESISTOR	27K	1/16W
R18	NRVA63D-100	M.F.RESISTOR	10	1/16W
R19	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R20	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R21	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R22	NRVA63D-912	M.F.RESISTOR	9.1K	1/16W
R23	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R24	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R25	NRVA63D-101	M.F.RESISTOR	100	1/16W
R26	NRVA63D-101	M.F.RESISTOR	100	1/16W
R27	NRVA63D-154	M.F.RESISTOR	150K	1/16W
R28	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R29	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R30	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R31	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R32	NRVA63D-103	M.F.RESISTOR	10K	1/16W

Symbol No.	Part No.	Part Name	Description	
R33	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R40	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R401	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R402	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R403	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R404	NRVA63D-101	M.F.RESISTOR	100	1/16W
R405	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R406	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R407	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R408	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R409	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R410	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R412	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R413	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R414	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R415	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R434	NRVA63D-101	M.F.RESISTOR	100	1/16W
R501	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R502	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R503	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R504	NRVA63D-101	M.F.RESISTOR	100	1/16W
R505	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R506	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R507	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R508	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R509	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R510	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R512	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R513	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R514	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R515	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R516	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R518	NRVA63D-393	M.F.RESISTOR	39K	1/16W
R519	NRVA63D-393	M.F.RESISTOR	39K	1/16W
R520	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R521	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R522	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R523	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R524	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R525	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R526	NRVA63D-330	M.F.RESISTOR	330	1/16W
R527	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R528	NRVA63D-561	M.F.RESISTOR	560	1/16W
R529	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R530	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R531	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R532	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R533	NRVA63D-100	M.F.RESISTOR	10	1/16W
R534	NRVA63D-101	M.F.RESISTOR	100	1/16W
R535	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R601	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R602	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R603	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R604	NRVA63D-101	M.F.RESISTOR	100	1/16W
R605	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R606	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R607	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R608	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R609	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W

Symbol No.	Part No.	Part Name	Description	
R610	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R612	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R613	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R614	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R615	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R634	NRVA63D-101	M.F.RESISTOR	100	1/16W
R701	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R702	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R703	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R704	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W
R706	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R707	NRVA63D-563	M.F.RESISTOR	56K	1/16W
R708	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R709	NRVA63D-181	M.F.RESISTOR	180	1/16W
R710	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R711	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R712	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R713	NRVA63D-221	M.F.RESISTOR	220	1/16W
R714	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R715	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R716	NRVA63D-182	M.F.RESISTOR	1.8K	1/16W
R717	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R718	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R719	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R720	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R721	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R722	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R723	NRVA63D-561	M.F.RESISTOR	560	1/16W
R724	NRVA63D-561	M.F.RESISTOR	560	1/16W
R725	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R726	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R727	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R728	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R729	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R730	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R731	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R732	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R733	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R734	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R735	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R736	NRVA63D-563	M.F.RESISTOR	56K	1/16W
R737	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R738	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R739	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R740	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R741	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R742	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R745	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R746	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R747	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R748	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R749	NRVA63D-132	M.F.RESISTOR	1.3K	1/16W
R750	NRVA63D-132	M.F.RESISTOR	1.3K	1/16W
R751	NRVA63D-681	M.F.RESISTOR	680	1/16W
R752	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R753	NRVA63D-393	M.F.RESISTOR	39K	1/16W
R754	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R755	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R756	NRVA63D-473	M.F.RESISTOR	47K	1/16W

Symbol No.	Part No.	Part Name	Description	
R757	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R758	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R759	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R762	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R763	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R764	NRVA63D-221	M.F.RESISTOR	220	1/16W
R765	NRVA63D-561	M.F.RESISTOR	560	1/16W
R767	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R768	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R769	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R770	NRVA63D-823	M.F.RESISTOR	82K	1/16W
R771	NRVA63D-823	M.F.RESISTOR	82K	1/16W
R772	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R773	NRSA63J-0R0	M.G.RESISTOR	0	1/16W (E)
R774	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R801	NRVA63D-393	M.F.RESISTOR	39K	1/16W (U)
	NRVA63D-273	M.F.RESISTOR	27K	1/16W (E)
R802	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R803	NRVA63D-473	M.F.RESISTOR	47K	1/16W (U)
R804	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W (U)
R805	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R806	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R807	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W
R808	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R809	NRVA63D-561	M.F.RESISTOR	560	1/16W
R810	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R811	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R812	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W (U)
	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W (E)
R813	NRVA63D-391	M.F.RESISTOR	390	1/16W
R814	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R815	NRVA63D-912	M.F.RESISTOR	9.1K	1/16W (U)
R816	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R817	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R818	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R819	NRVA63D-471	M.F.RESISTOR	470	1/16W
R820	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R821	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R822	NRVA63D-471	M.F.RESISTOR	470	1/16W
R823	NRVA63D-471	M.F.RESISTOR	470	1/16W
R824	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R825	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R827	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R828	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R829	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R830	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R831	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R832	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R833	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R834	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R835	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R836	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R837	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R838	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W (U)
	NRVA63D-822	M.F.RESISTOR	8.2K	1/16W (E)
R839	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W (U)
	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W (E)
R840	NRVA63D-102	M.F.RESISTOR	1K	1/16W (U)
	NRVA63D-112	M.F.RESISTOR	1.1K	1/16W (E)
R841	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W

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Symbol No.	Part No.	Part Name	Description	
R842	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R843	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R844	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R845	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R846	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R847	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R848	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R849	NRVA63D-224	M.F.RESISTOR	220K	1/16W
R850	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R851	NRVA63D-392	M.F.RESISTOR	3.9K	1/16W
R852	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W(U)
	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W(E)
R853	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W(U)
	NRVA63D-182	M.F.RESISTOR	1.8K	1/16W(E)
R854	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R855	NRVA63D-104	M.F.RESISTOR	100K	1/16W(E)
R856	NRVA63D-183	M.F.RESISTOR	18K	1/16W(E)
R857	NRVA63D-102	M.F.RESISTOR	1K	1/16W(U)
	NRVA63D-112	M.F.RESISTOR	1.1K	1/16W(E)
R858	NRVA63D-273	M.F.RESISTOR	27K	1/16W(U)
	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W(E)
R859	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R860	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R861	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R862	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W
R863	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R864	NRVA63D-272	M.F.RESISTOR	2.7K	1/16W
R865	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R866	NRVA63D-121	M.F.RESISTOR	120	1/16W
R867	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W
R868	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R869	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R870	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R871	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R872	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R873	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R874	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R875	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R876	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R877	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R878	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R879	NRVA63D-273	M.F.RESISTOR	27K	1/16W(U)
	NRVA63D-122	M.F.RESISTOR	1.2K	1/16W(E)
R880	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R881	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R882	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R884	NRVA63D-100	M.F.RESISTOR	10	1/16W
R885	NRSA63J-6R8	M.G.RESISTOR	6.8	1/16W
R886	NRVA63D-100	M.F.RESISTOR	10	1/16W
R887	NRVA63D-151	M.F.RESISTOR	150	1/16W
R888	NRVA63D-151	M.F.RESISTOR	150	1/16W
R889	NRVA63D-121	M.F.RESISTOR	120	1/16W
R890	NRVA63D-331	M.F.RESISTOR	330	1/16W
R891	NRSA63J-6R8	M.G.RESISTOR	6.8	1/16W
R892	NRVA63D-100	M.F.RESISTOR	10	1/16W
R893	NRSA63J-6R8	M.G.RESISTOR	6.8	1/16W
R894	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R897	NRVA63D-151	M.F.RESISTOR	150	1/16W
R898	NRVA63D-181	M.F.RESISTOR	180	1/16W(U)
	NRVA63D-221	M.F.RESISTOR	220	1/16W(E)

Symbol No.	Part No.	Part Name	Description	
R899	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W(U)
	NRVA63D-152	M.F.RESISTOR	1.5K	1/16W(E)
R900	NRVA63D-181	M.F.RESISTOR	180	1/16W
R901	NRVA63D-181	M.F.RESISTOR	180	1/16W
R902	NRVA63D-393	M.F.RESISTOR	39K	1/16W
R903	NRVA63D-820	M.F.RESISTOR	82	1/16W
VR801	NVP1313-102	TRIM.RESISTOR	1K	C.LEVEL
C1	NEH90JM-107	E.CAPACITOR	100	6.3V
C2	NEH90JM-107	E.CAPACITOR	100	6.3V
C3	NCB31CK-473	CER.CAPACITOR	0.047	16V
C4	NCB31CK-473	CER.CAPACITOR	0.047	16V
C5	NCB31CK-473	CER.CAPACITOR	0.047	16V
C6	NCB31CK-473	CER.CAPACITOR	0.047	16V
C7	NCB31CK-473	CER.CAPACITOR	0.047	16V
C8	NCB31CK-473	CER.CAPACITOR	0.047	16V
C10	NCB31CK-473	CER.CAPACITOR	0.047	16V
C11	NCB31CK-473	CER.CAPACITOR	0.047	16V
C12	NCT06CH-180	CER.CAPACITOR	18P	50V
C13	NCT06CH-101	CER.CAPACITOR	100P	50V
C14	NCT06CH-2R0	CER.CAPACITOR	2.0P	50V
C32	NCT06CH-271	CER.CAPACITOR	270P	50V
C401	NCB31CK-473	CER.CAPACITOR	0.047	16V
C402	NCB31CK-473	CER.CAPACITOR	0.047	16V
C403	NCT06CH-331	CER.CAPACITOR	330P	50V
C501	NCB31CK-473	CER.CAPACITOR	0.047	16V
C502	NCB31CK-473	CER.CAPACITOR	0.047	16V
C503	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C504	NCB31CK-473	CER.CAPACITOR	0.047	16V
C505	NEE50GM-476	TAN.CAPACITOR	47	4V
C506	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C507	NCB31CK-473	CER.CAPACITOR	0.047	16V
C508	NCB31CK-473	CER.CAPACITOR	0.047	16V
C509	NCB31CK-473	CER.CAPACITOR	0.047	16V
C510	NCB31CK-473	CER.CAPACITOR	0.047	16V
C511	NCB31CK-473	CER.CAPACITOR	0.047	16V
C512	NCB31CK-473	CER.CAPACITOR	0.047	16V
C513	NCT06CH-331	CER.CAPACITOR	330P	50V
C601	NCB31CK-473	CER.CAPACITOR	0.047	16V
C602	NCB31CK-473	CER.CAPACITOR	0.047	16V
C603	NCT06CH-331	CER.CAPACITOR	330P	50V
C701	NEE50GM-476	TAN.CAPACITOR	47	4V
C704	NCT06CH-102	CER.CAPACITOR	1000P	50V
C705	NCT06CH-390	CER.CAPACITOR	39P	50V
C706	NCT06CH-150	CER.CAPACITOR	15P	50V
C707	NCT06CH-390	CER.CAPACITOR	39P	50V
C708	NCT06CH-150	CER.CAPACITOR	15P	50V
C709	NEE51EM-105	TAN.CAPACITOR	1.0	25V
C710	NCB31CK-473	CER.CAPACITOR	0.047	16V
C711	NCB31CK-473	CER.CAPACITOR	0.047	16V
C712	NEE50GM-476	TAN.CAPACITOR	47	4V
C713	NEE50GM-476	TAN.CAPACITOR	47	4V
C714	NCB31CK-473	CER.CAPACITOR	0.047	16V
C715	NCB31CK-473	CER.CAPACITOR	0.047	16V
C716	NCT06CH-390	CER.CAPACITOR	39P	50V
C801	NCB31CK-473	CER.CAPACITOR	0.047	16V

5.7 CP BOARD ASSEMBLY LIST [0][7]

SCK2443-03-00A [0][7]□□□□□□

Symbol No.	Part No.	Part Name	Description	
C802	NCB31CK-473	CER.CAPACITOR	0.047	16V
C805	NCB31CK-473	CER.CAPACITOR	0.047	16V
C806	NCB31CK-473	CER.CAPACITOR	0.047	16V
C807	NCT06CH-150	CER.CAPACITOR	15P	50V
C808	NCT06CH-150	CER.CAPACITOR	15P	50V
C809	NCB31CK-473	CER.CAPACITOR	0.047	16V
C810	NCB31CK-473	CER.CAPACITOR	0.047	16V
C811	NCB31CK-473	CER.CAPACITOR	0.047	16V
C812	NCB31CK-473	CER.CAPACITOR	0.047	16V
C813	NCB31CK-473	CER.CAPACITOR	0.047	16V
C814	NCB31CK-473	CER.CAPACITOR	0.047	16V
C815	NCB31CK-473	CER.CAPACITOR	0.047	16V
C816	NCB31CK-473	CER.CAPACITOR	0.047	16V
C817	NCB31CK-473	CER.CAPACITOR	0.047	16V
C818	NCT06CH-150	CER.CAPACITOR	15P	50V
C819	NCT06CH-150	CER.CAPACITOR	15P	50V
C820	NCB31CK-473	CER.CAPACITOR	0.047	16V
C823	NCB31CK-473	CER.CAPACITOR	0.047	16V
C824	NCB31CK-473	CER.CAPACITOR	0.047	16V
C825	NCB31CK-473	CER.CAPACITOR	0.047	16V
C826	NCB31CK-473	CER.CAPACITOR	0.047	16V
C827	NCB31CK-473	CER.CAPACITOR	0.047	16V
C828	NCB31CK-473	CER.CAPACITOR	0.047	16V
C829	NCB31CK-473	CER.CAPACITOR	0.047	16V
C830	NCB31CK-473	CER.CAPACITOR	0.047	16V
C831	NCT06CH-101	CER.CAPACITOR	100P	50V
L1	SCV2662-027	FERRITE BEADS		
L2	SCV2662-027	FERRITE BEADS		
L501	SCV2662-027	FERRITE BEADS		
L502	SCV2662-027	FERRITE BEADS		
L701	SCV1950-470	PEAKING COIL	47μH	
LC801	SCV2597-S144Z	FILTER		
LC802	SCV2597-S144Z	FILTER		
LC803	SCV2597-S144Z	FILTER		
DL401	SCV2760-001Z	DELAY LINE	70(NSEC)	
DL501	SCV2760-001Z	DELAY LINE	70(NSEC)	
DL601	SCV2760-001Z	DELAY LINE	70(NSEC)	
DL701	SCV2528-001Z	DELAY LINE	150(NSEC)	(U)
DL702	SCV2528-001Z	DELAY LINE	150(NSEC)	(E)
DL801	SCV2528-001Z	DELAY LINE	150(NSEC)	
DL802	SCV2528-001Z	DELAY LINE	150(NSEC)	
DL803	SCV2637-001	B.P.F	3.58 MHz	(U)
	SCV2638-001	B.P.F.	4.43 MHz	(E)
CN5	CHB102W-24R	CONNECTOR	24PIN	
CN6	CHB102W-14R	CONNECTOR	14PIN	
CN26	SCV1770-004	CONNECTOR	4PIN	
TP405	SCV1880-001	TEST POINT	OUT B	
TP505	SCV1880-001	TEST POINT	OUT G	
TP604	SCV1880-001	TEST POINT	PR G	
TP605	SCV1880-001	TEST POINT	OUT R	
TP701	SCV1880-001	TEST POINT	DLAIED G	
TP702	SCV1880-001	TEST POINT	CONTOUR	

Symbol No.	Part No.	Part Name	Description	
IC901	MB89T715AHPF	I.C.(M)	FUJITSU	
IC902	LH5168N-10L	I.C.(M)	SHARP	
IC903	NM93C66M8X	I.C.(M)	NATIONAL SEMICO	
IC904	MC74HC139AF	I.C.(M)	MOTOROLA	
IC905	MC74HC373AF	I.C.(M)	MOTOROLA	
IC906	PLSC1148	I.C.(M)	MBM27C512P-15	
IC906	SCV2543-A28	IC SOCKET		
SK906A	SCV2543-C28	IC SOCKET		
IC907	TC74HC238AF	I.C.(M)	TOSHIBA	
IC908	TC74HC04AF	I.C.(M)	TOSHIBA	
IC909	TC7S08F	I.C.(M)	TOSHIBA	
IC910	S-8054HNCB	I.C.(M)	SEIKO	
IC911	MC74HC165F	I.C.(M)	MOTOROLA	
IC912	MB89012-109	I.C.(M)	FUJITSU	
Q901	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q902	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q903	DTA124EU	TRANSISTOR	ROHM	
D901	MA142A	DIODE	MATSUSHITA	
R901	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R902	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R903	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R904	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R905	NRVA63D-472	M.F.RESISTOR	4.7K	1/16W
R906	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W
R907	NRVA63D-101	M.F.RESISTOR	100	1/16W
R909	NRVA63D-102	M.F.RESISTOR	1.0K	1/16W
R910	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R912	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R913	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R914	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R915	NRVA63D-221	M.F.RESISTOR	220	1/16W
R917	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R918	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R921	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R922	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R923	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R924	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R925	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R926	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R927	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R928	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R929	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R930	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R931	NRVA63D-101	M.F.RESISTOR	100	1/16W
R932	NRVA63D-101	M.F.RESISTOR	100	1/16W
R933	NRVA63D-101	M.F.RESISTOR	100	1/16W
R934	NRVA63D-101	M.F.RESISTOR	100	1/16W
R935	NRVA63D-101	M.F.RESISTOR	100	1/16W
R936	NRVA63D-101	M.F.RESISTOR	100	1/16W
R937	NRVA63D-101	M.F.RESISTOR	100	1/16W
R939	NRVA63D-101	M.F.RESISTOR	100	1/16W
R940	NRVA63D-101	M.F.RESISTOR	100	1/16W

[CP]

Symbol No.	Part No.	Part Name	Description	
R941	NRVA63D-101	M.F.RESISTOR	100	1/16W
R942	NRVA63D-101	M.F.RESISTOR	100	1/16W
R943	NRVA63D-101	M.F.RESISTOR	100	1/16W
R944	NRVA63D-101	M.F.RESISTOR	100	1/16W
R945	NRVA63D-101	M.F.RESISTOR	100	1/16W
R946	NRVA63D-101	M.F.RESISTOR	100	1/16W
R947	NRVA63D-101	M.F.RESISTOR	100	1/16W
R948	NRVA63D-101	M.F.RESISTOR	100	1/16W
R949	NRVA63D-101	M.F.RESISTOR	100	1/16W
R950	NRVA63D-101	M.F.RESISTOR	100	1/16W
R951	NRVA63D-101	M.F.RESISTOR	100	1/16W
R952	NRVA63D-101	M.F.RESISTOR	100	1/16W
R960	NRVA63D-473	M.F.RESISTOR	47K	1/16W
VR901	NVP1415-103	TRIM.RESISTOR		
C901	QEZ0171-224	E.CAPACITOR	0.22	
C902	NCT06CH-151	CER.CAPACITOR	150P	50V
C903	NCT06CH-181	CER.CAPACITOR	180P	50V
C906	NCB31CK-473	CER.CAPACITOR	0.047	16V
C907	NCB31CK-473	CER.CAPACITOR	0.047	16V
C911	NEE51AM-476	TAN.CAPACITOR	47	10V
C912	NEE51AM-476	TAN.CAPACITOR	47	10V
C913	NFV41HJ-104	F.CAPACITOR	0.10	50V
C914	NEF11AM-225	TAN.CAPACITOR	2.2	10V
C915	NFV41HJ-104	F.CAPACITOR	0.10	50V
C916	NEE51AM-476	TAN.CAPACITOR	47	10V
C917	NCB31CK-473	CER.CAPACITOR	0.047	16V
C918	NCB31CK-473	CER.CAPACITOR	0.047	16V
C919	NCB31CK-473	CER.CAPACITOR	0.047	16V
C920	NCB31CK-473	CER.CAPACITOR	0.047	16V
C921	NCB31CK-473	CER.CAPACITOR	0.047	16V
C922	NCB31CK-473	CER.CAPACITOR	0.047	16V
C923	NFV41HJ-104	F.CAPACITOR	0.10	50V
C924	NCB31CK-473	CER.CAPACITOR	0.047	16V
C925	NCB31CK-473	CER.CAPACITOR	0.047	16V
C926	NCB31CK-473	CER.CAPACITOR	0.047	16V
C927	NCB31CK-473	CER.CAPACITOR	0.047	16V
L901	SCV1950-4R7	PEAKING COIL	4.7μH	
X901	SCV2614-001	CRYSTAL	11.059 MHz	
S901	SCV2247-004	SWITCH		
S902	SCV2588-106	ROTARY SWITCH	ADJ.SW	
S903	SCV2162-001	SWITCH	ADJ.SET	
CN7	CHB102W-24R	CONNECTOR	24PIN	
CN8	CHB102W-14R	CONNECTOR	14PIN	
TP901	SCV1880-001	TEST POINT		
TP902	SCV1880-001	TEST POINT		
TP903	SCV1880-001	TEST POINT		
TP904	SCV1880-001	TEST POINT		

5.8 DT BOARD ASSEMBLY LIST [0][8]

SCK2443-04-00A [0][8]□□□□□□

Symbol No.	Part No.	Part Name	Description	
IC1	NJM062M	I.C.(M)	JRC	
IC921	MB89012-109	I.C.(M)	FUJITSU	
IC922	LMC6082IM	I.C.(M)	NATIONAL SEMICO	
IC923	LMC6082IM	I.C.(M)	NATIONAL SEMICO	
IC924	MC74HC4052F	I.C.(M)	MOTOROLA	
IC925	NJM062M	I.C.(M)	JRC	
IC926	TC4W53F	I.C.(M)	TOSHIBA	
IC927	MC74HC02AF	I.C.(M)	MOTOROLA	
IC928	NJM062M	I.C.(M)	JRC	
IC929	NJM062M	I.C.(M)	JRC	
IC930	NJM062M	I.C.(M)	JRC	
IC931	TC4S66F	I.C.(M)	TOSHIBA	
IC932	NJM062M	I.C.(M)	JRC	
IC933	NJM062M	I.C.(M)	JRC	
IC934	NJM062M	I.C.(M)	JRC	
IC935	MB88353PFV-ER	I.C.(M)	FUJITSU	
IC936	NJM062M	I.C.(M)	JRC	
IC937	NJM062M	I.C.(M)	JRC	
IC938	TC4066BF	I.C.(M)	TOSHIBA	
IC939	TC7S04F	I.C.(M)	TOSHIBA	
IC940	TC4S66F	I.C.(M)	TOSHIBA	
IC941	TC4S66F	I.C.(M)	TOSHIBA	
IC943	TC4S66F	I.C.(M)	TOSHIBA	
D911	MA742	DIODE	MATSUSHITA	
D912	MA742	DIODE	MATSUSHITA	
D913	MA742	DIODE	MATSUSHITA	
D914	MA742	DIODE	MATSUSHITA	
D915	MA742	DIODE	MATSUSHITA	
D916	MA742	DIODE	MATSUSHITA	
D917	MA143A	DIODE	MATSUSHITA	
R2	NRVA63D-184	M.F.RESISTOR	180K	1/16W
R3	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R4	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R5	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R6	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R7	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R351	NRVA63D-562	M.F.RESISTOR	5.6K	1/16W
R352	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R353	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R354	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R355	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R356	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R357	NRVA63D-183	M.F.RESISTOR	18K	1/16W
R358	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R359	NRVA63D-363	M.F.RESISTOR	36K	1/16W
R360	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R953	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R954	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R956	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R957	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R958	NRVA63D-332	M.F.RESISTOR	3.3K	1/16W
R959	NRVA63D-683	M.F.RESISTOR	68K	1/16W
R960	NRVA63D-101	M.F.RESISTOR	100	1/16W
R961	NRVA63D-682	M.F.RESISTOR	6.8K	1/16W
R962	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R963	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R964	NRVA63D-273	M.F.RESISTOR	27K	1/16W

Symbol No.	Part No.	Part Name	Description	
R965	NRVA63D-101	M.F.RESISTOR	100	1/16W
R971	NRVA63D-393	M.F.RESISTOR	39K	1/16W
R972	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R973	NRVA63D-393	M.F.RESISTOR	39K	1/16W
R974	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R975	NRVA63D-393	M.F.RESISTOR	39K	1/16W
R976	NRVA63D-333	M.F.RESISTOR	33K	1/16W
R977	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R979	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R980	NRVA63D-104	M.F.RESISTOR	100K	1/16W
R981	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R982	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R983	NRVA63D-124	M.F.RESISTOR	120K	1/16W
R984	NRVA63D-101	M.F.RESISTOR	100	1/16W
R985	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R986	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R987	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R988	NRVA63D-103	M.F.RESISTOR	10K	1/16W
R989	NRVA63D-101	M.F.RESISTOR	100	1/16W
R994	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R995	NRVA63D-223	M.F.RESISTOR	22K	1/16W
R996	NRVA63D-123	M.F.RESISTOR	12K	1/16W
R997	NRVA63D-823	M.F.RESISTOR	82K	1/16W
VR1	NVP1314-104	TRIM.RESISTOR	100K	
VR2	NVP1314-104	TRIM.RESISTOR	100K	
C931	NCT06CH-151	CER.CAPACITOR	150P	50V
C932	NCT06CH-181	CER.CAPACITOR	180P	50V
C933	NCB31CK-473	CER.CAPACITOR	0.047	16V
C934	NFV41CJ-473	F.CAPACITOR	0.047	16V
C935	NCB31CK-473	CER.CAPACITOR	0.047	16V
C936	NFV41CJ-473	F.CAPACITOR	0.047	16V
C941	NEE51AM-476	TAN.CAPACITOR	47	10V
C942	NEE51AM-476	TAN.CAPACITOR	47	10V
C943	NEE51CM-156	TAN.CAPACITOR	15	16V
C944	NEE51CM-156	TAN.CAPACITOR	15	16V
C945	NCB31CK-473	CER.CAPACITOR	0.047	16V
C946	NCB31CK-473	CER.CAPACITOR	0.047	16V
C947	NCB31CK-473	CER.CAPACITOR	0.047	16V
C948	NCB31CK-473	CER.CAPACITOR	0.047	16V
C949	NCB31CK-473	CER.CAPACITOR	0.047	16V
C950	NCB31CK-473	CER.CAPACITOR	0.047	16V
C951	NCB31CK-473	CER.CAPACITOR	0.047	16V
C952	NCB31CK-473	CER.CAPACITOR	0.047	16V
C953	NCB31CK-473	CER.CAPACITOR	0.047	16V
C954	NCB31CK-473	CER.CAPACITOR	0.047	16V
C955	NCB31CK-473	CER.CAPACITOR	0.047	16V
C956	NCB31CK-473	CER.CAPACITOR	0.047	16V
C957	NCB31CK-473	CER.CAPACITOR	0.047	16V
C958	NCB31CK-473	CER.CAPACITOR	0.047	16V
C959	NCB31CK-473	CER.CAPACITOR	0.047	16V
C960	NCB31CK-473	CER.CAPACITOR	0.047	16V
C961	NCB31CK-473	CER.CAPACITOR	0.047	16V
C963	NCB31CK-473	CER.CAPACITOR	0.047	16V
C964	NCB31CK-473	CER.CAPACITOR	0.047	16V
C965	NCB31CK-473	CER.CAPACITOR	0.047	16V
C966	NCB31CK-473	CER.CAPACITOR	0.047	16V

Symbol No.	Part No.	Part Name	Description	
C967	NCB31CK-473	CER.CAPACITOR	0.047	16V
C968	NCB31CK-473	CER.CAPACITOR	0.047	16V
C969	NEE51AM-226	TAN.CAPACITOR	22	10V
C970	NCT06CH-181	CER.CAPACITOR	180P	50V
C971	NCB31CK-473	CER.CAPACITOR	0.047	16V
C973	NCB31CK-473	CER.CAPACITOR	0.047	16V
C974	NCB31CK-473	CER.CAPACITOR	0.047	16V
C975	NCB31CK-473	CER.CAPACITOR	0.047	16V
C976	NCB31CK-473	CER.CAPACITOR	0.047	16V
L902	SCV1950-4R7	PEAKING COIL	4.7μH	
CN9	CHB102W-24R	CONNECTOR	24PIN	
CN10	CHB102W-14R	CONNECTOR	14PIN	
TP911	SCV1880-001	TEST POINT		
TP912	SCV1880-001	TEST POINT		
TP913	SCV1880-001	TEST POINT		
TP914	SCV1880-001	TEST POINT		

5.9 IF BOARD ASSEMBLY LIST [0][9]

SCK2449-02-00A [0][9]□□□□□□

Symbol No.	Part No.	Part Name	Description	
IC311	MC74HC165F	I.C.(M)	MOTOROLA	
D301	MA143A	DIODE	MATSUSHITA	
D302	MA143A	DIODE	MATSUSHITA	
D303	MA143A	DIODE	MATSUSHITA	
D304	MA143A	DIODE	MATSUSHITA	
D305	MA143A	DIODE	MATSUSHITA	
D309	MA143A	DIODE	MATSUSHITA	
D310	MA143A	DIODE	MATSUSHITA	
D311	MA143A	DIODE	MATSUSHITA	
D312	MA143A	DIODE	MATSUSHITA	
D313	MA143A	DIODE	MATSUSHITA	
D314	MA143A	DIODE	MATSUSHITA	
D315	MA143A	DIODE	MATSUSHITA	
D316	MA143A	DIODE	MATSUSHITA	
D317	MA143A	DIODE	MATSUSHITA	
D318	MA143A	DIODE	MATSUSHITA	
LD301	GL3EG44	L.E.D.	SHARP	
LD302	GL3HS44	L.E.D.	SHARP	
R311	NRVA63D-471	M.F.RESISTOR	470	1/16W
R313	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R314	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R315	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R316	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R317	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R318	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R319	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R320	NRVA63D-473	M.F.RESISTOR	47K	1/16W
R321	NRSA63J-680	M.G.RESISTOR	68	1/16W
R322	NRSA63J-680	M.G.RESISTOR	68	1/16W
R323	NRSA63J-680	M.G.RESISTOR	68	1/16W
R324	NRVA63D-121	M.F.RESISTOR	120	1/16W
R325	NRVA63D-750	M.F.RESISTOR	75	1/16W
R329	NRVA63D-471	M.F.RESISTOR	470	1/16W
R330	NRVA63D-471	M.F.RESISTOR	470	1/16W
R331	NRVA63D-471	M.F.RESISTOR	470	1/16W
R332	NRVA63D-471	M.F.RESISTOR	470	1/16W
R333	NRVA63D-681	M.F.RESISTOR	680	1/16W
R334	NRVA63D-681	M.F.RESISTOR	680	1/16W
R335	NRVA63D-151	M.F.RESISTOR	150	1/16W
R336	NRVA63D-750	M.F.RESISTOR	75	1/16W
R338	NRVA63D-471	M.F.RESISTOR	470	1/16W
R339	NRVA63D-471	M.F.RESISTOR	470	1/16W
R340	NRVA63D-471	M.F.RESISTOR	470	1/16W
R341	NRVA63D-471	M.F.RESISTOR	470	1/16W
R342	NRVA63D-471	M.F.RESISTOR	470	1/16W
R343	NRVA63D-151	M.F.RESISTOR	150	1/16W
R344	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R345	NRVA63D-222	M.F.RESISTOR	2.2K	1/16W
R346	NRVA63D-151	M.F.RESISTOR	150	1/16W
C321	NCB21EK-473	CER.CAPACITOR	0.047	25V
C322	NCB21EK-473	CER.CAPACITOR	0.047	25V
C323	NCB21EK-473	CER.CAPACITOR	0.047	25V
C324	NEF11AM-156	TAN.CAPACITOR	15	10V

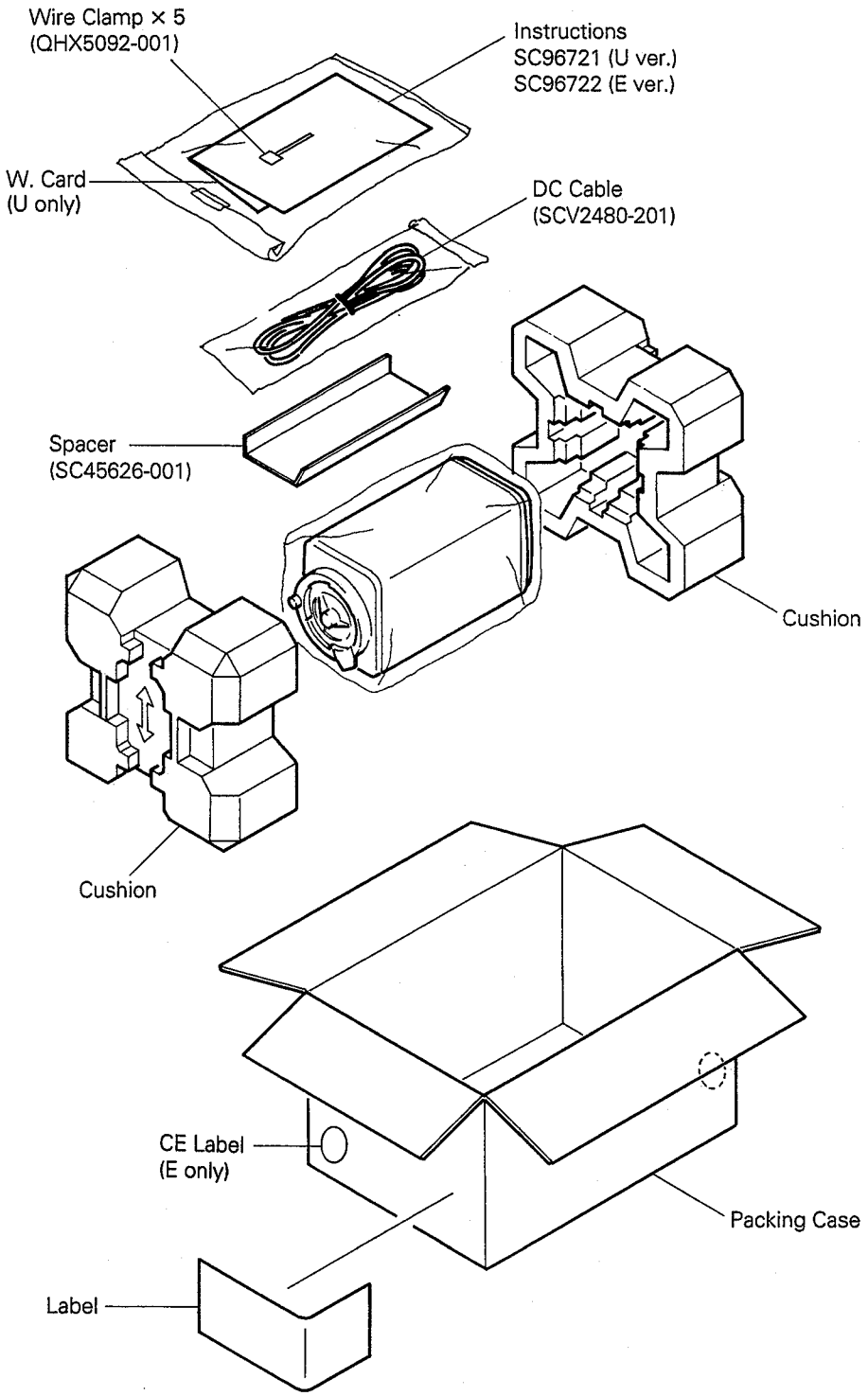
Symbol No.	Part No.	Part Name	Description
L301	SCV2662-027	FERRITE BEADS	
L302	SCV2662-027	FERRITE BEADS	
L303	SCV2662-027	FERRITE BEADS	
L304	SCV2662-027	FERRITE BEADS	
L305	SCV2662-027	FERRITE BEADS	
L306	SCV2662-027	FERRITE BEADS	
L307	SCV2662-060	FERRITE BEADS	
L308	SCV2662-060	FERRITE BEADS	
LC311	EXC-CET471U	EMI FILTER	
LC312	EXC-CET471U	EMI FILTER	
S301	SCV2679-001	TACT SWITCH	MENU
S302	SCV2679-001	TACT SWITCH	ITEM(-)
S303	SCV2679-001	TACT SWITCH	ITEM(+)
S304	SCV2679-001	TACT SWITCH	DATA(-)
S305	SCV2679-001	TACT SWITCH	DATA(+)
S306	SCV2680-001	TACT SWITCH	RESET
S307	SCV2169-001	SLIDE SWITCH	
CN11	SSV2614-20	FFC CONNECTOR	20PIN
CN12	SSV2614-20	FFC CONNECTOR	20PIN

5.10 MT BOARD ASSEMBLY LIST [1][0]

SCK2449-01-00A [1][0]□□□□□□

Symbol No.	Part No.	Part Name	Description	
IC301	TA7809F	I.C.(M)	TOSHIBA	
IC302	NJM78L09UA	I.C.(M)	JRC	
Q301	2SJ133-Z	F.E.T.	NEC	
Q302	2SJ133-Z	F.E.T.	NEC	
Q303	2SJ133-Z	F.E.T.	NEC	
Q304	2SJ133-Z	F.E.T.	NEC	
R301	NRSA63J-100	M.G.RESISTOR	10	1/16W
R302	NRSA63J-100	M.G.RESISTOR	10	1/16W
R303	NRSA63J-100	M.G.RESISTOR	10	1/16W
C301	NEA11EM-336	E.CAPACITOR	33	25V
C302	NEA11EM-336	E.CAPACITOR	33	25V
C303	NEA11EM-336	E.CAPACITOR	33	25V
C304	NEF11VM-105	TAN.CAPACITOR	1.0	35V
C305	NEF11CM-335	TAN.CAPACITOR	3.3	16V
C306	NEF11CM-335	TAN.CAPACITOR	3.3	16V
C307	NEF11AM-475	TAN.CAPACITOR	4.7	10V
C308	NEF11AM-475	TAN.CAPACITOR	4.7	10V
C309	NEF11VM-105	TAN.CAPACITOR	1.0	35V
C310	NEF11VM-105	TAN.CAPACITOR	1.0	35V
C311	NEZ0003-336	E.CAPACITOR	33	10V
LC301	SCV1804-222	EMI FILTER		
LC302	SCV1804-222	EMI FILTER		
LC303	SCV1804-222	EMI FILTER		
LC304	SCV1804-222	EMI FILTER		
LC305	SCV1804-222	EMI FILTER		
CN1	SSV2614-24	CONNECTOR	24PIN	
CN2	SSV2614-24	CONNECTOR	24PIN	
CN3	CHB102W-24P	CONNECTOR	24PIN	
CN4	CHB102W-14P	CONNECTOR	14PIN	
CN5	CHB102W-24P	CONNECTOR	24PIN	
CN6	CHB102W-14P	CONNECTOR	14PIN	
CN7	CHB102W-24P	CONNECTOR	24PIN	
CN8	CHB102W-14P	CONNECTOR	14PIN	
CN9	CHB102W-24P	CONNECTOR	24PIN	
CN10	CHB102W-14P	CONNECTOR	14PIN	
CN11	SSV1983-020	CONNECTOR	20PIN	
CN12	SSV1983-020	CONNECTOR	20PIN	
TP1	SCV1880-001	TEST POINT		

SECTION 6
REPACKING



Note: Accessories above are subject to change without notice.